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of the South and Southwest as the Nation's Greatest Material Asset

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RICHARD H. EDMONDS, President
FRANK GOULD, Vice-President

VICTOR H. POWER, Treasurer
I. S. FIELD, Secretary

RICHARD H. EDMONDS, Editor

BRANCH OFFICES:

CHICAGO, 11 So. La Salle St.
ST. LOUIS, 915 Olive St.
WASHINGTON (Whaley-Eaton Service), 456-459 Munsey Bldg.
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GO AND DO LIKEWISE.

REV. JAMES V. CHALMERS, president of the Church Temperance Society, of New York, in a letter to the *Manufacturers Record* in regard to the pamphlet "The Prohibition Question" writes as follows:

"By far the best thing I have come across in my life time is your splendid contribution "The Prohibition Question." I borrowed a copy from Canon Chase yesterday, sat up until midnight drinking in with joy the replies sent in to you. Your work is a service rendered not to this country only but to the world. A work for God and man. We can use ten copies and I enclose check for same and will probably need more later."

We invite all others who are interested in this subject to study the pamphlet in the light which Dr. Chalmers so strongly put. The price is 50 cents a copy.

From bankers, manufacturers and Prohibition workers generally we are receiving the same kind of enthusiastic commendations of the "Prohibition Question" pamphlet as that expressed by Dr. Chalmers.

It is a noticeable fact that leading business men in various parts of the country, eager to spread the information in favor of Prohibition, are ordering copies all the way from 25 to 200 each in order that they may help carry on the good work of making known throughout America how the business men of the country are regarding Prohibition from the strictly economic point of view as of vital interest to the welfare of the country, as well as from the moral side. The economic side is one which necessarily appeals with tremendous force to every business man in the country, and even to some who do not consider it at all from the moral standpoint.

THE THRESHOLD OF A NEW ERA.

At the very moment we are on the threshold of a new era. Undoubtedly there is more than a mere business revival in sight.—President Harding.

Men read the statistics of progress and find them good. They glimpse quotations on the stock market and find that values, out of which their own Government had knocked the bottom, again are nearing normal. Once more the farmer can view his crop and be assured, if he makes it, that there will be profit for him and his. A great nation, almost self-contained, whose total foreign commerce has been less than 10 per cent of its total business, has learned that it can prosper if all is well at home, so vast are its continental areas, so diversified its products. And so, peering at old sign posts and reading old auguries that do not fail, men of intelligence look into the future unafraid, foresee "more than a mere business revival" and rejoice in their hearts.

We do not underrate the importance of the guide posts which are examined. The statistics make good evidence in any court. Steel orders still are the barometer of trade conditions and none can ignore the advantage to one great section of a 50 per cent increase in the price of wheat or to another great section of cotton back to 20 cents. They, indeed, are the signs of a business revival. But not to them do we look for the prophecy of "the new era" on the threshold of which we stand.

Greater than the hum of wheels in factory is the application of intelligence to the amelioration of the burdens of human existence. The power of ten thousand oxen is in a tiny brain cell. Look to the patent office! The mechanical creations of a century ago, prodigious as they then appeared, seem now to have been the rough and almost pathetic efforts of childish barbarians. "The automobile has made every American a mechanician." There is no satisfaction with anything of metal that moves. A thousand times ten thousand brains are examining the vitals of mechanics. In many lines of endeavor the processes of today are obsolescent before the factories to utilize them can be built.

Weigh in the scales the world of a hundred years ago and the world today. How many times has the wealth of earth and the comfort of its inhabitants been multiplied in three short generations by mere mechanical development! Yet the record tends to show that our mechanical advance now is greater in ten years than it formerly was in fifty. "I believe," says a man of great vision who virtually stood in at the birth of the age of electricity, "that the inventive skill of man, if permitted to run its course, will within the next 75

years have so conquered and harnessed the secrets and powers of nature that the whole world can be fed, clothed and maintained in a condition of comfort approaching luxury, if no man in it works more than three hours a day! "He did not view such a condition as a desirable thing. He stated it as a probable fact. "And heaven only knows what will happen to us," he added, "when such a period arrives, for the prosperity will be too great for human nature to stand."

Wherein is humanity failing? There has been virtually no progress in the science of government in seventy generations. There is plenty of the sort of patriotism that bares the breast to bullets, but in the routine conduct of government men still sacrifice the public weal to private interest, and selfishness is rampant. The high ideal of public service is found in the textbooks, not in the lives of statesmen and prejudice feeds in the public forum. How wide the gap! What better for the general good than sobriety, but the bootlegger plies his trade in the precincts of respectability and men of affairs, who ought to know better, prate of personal liberty and defy the law when every faculty of intelligence they possess unites in warning them that the very plentitude of power which increasing knowledge has given to humanity, with all the resultant complexity of modern civilized life, has made it imperative that men keep their heads. The sort of life that is ahead for posterity will terminate in chaos unless there is development in the science of government, which means a new concept of the responsibility of the individual officer and of the unofficial individual in common sacrifice for the general good. When through divine knowledge we have been unburdened of the sweat of the body and the fruits of the earth turned over to us, can we be capable of self-government?

The radio is everywhere. Distance in fact is in process of annihilation. One inventor tells us that the ethereal rays of a year ago may circle now into a receiving instrument and throw on a screen the living picture of events long past. Who knows? Another man has been experimenting, quite successfully, with a plan to produce all our foods in factories. He proposes to cover, say, a square mile with a building in which he will reproduce the conditions of sunlight for 24 hours continuously, surrounding growing vegetables with the ideal atmosphere for their best and quickest development. It is intimated that a factory of this size, as conducted, could produce, say, each year the equivalent of the entire annual agricultural production of North Carolina.

A little child who dips his toy bucket into the Atlantic ocean takes from it as much water as we have taken power from the power oceans that surround us. A race of pigmies might pat themselves on their backs and cry: "See what we have done. We have taken the sunlight of forgotten centuries, coal, and changed it into energy that transports our goods on railways from one city to another." Genius would only smile as it watched the waters rolling down the mountains to the sea, unharnessed. How pitiable to have enslaved the paltry muscles of men when gravity itself, a universal ocean of power, might have been yoked to machinery. There may be in one molecule, in a single atom, almost infinite energy.

Two thousand years of construction and men's labor are stored on Europe's surface. There are roads built by the Romans, harbors developed by them; great cathedrals raised

in the Middle Ages; fields long tilled and brought to a high point of production; canals; cities; and accumulation of knowledge—the tangible and intangible savings of generation after generation. That is wealth. It is the stored labor of the dead. Yet babblers in pessimism cry out that Europe is bankrupt and civilization is dying. Europe bankrupt! Why before this continent can be developed to the general form of European development, so peopled and so made ready for posterity, there will be spent not what Europe owes, but ten times the amount, and more. It has been said that the invention of the internal combustion engine created more wealth on earth than the total cost of the Great War.

That may be an exaggeration, but some lean chemist, in some lone laboratory, may tomorrow liquidate the world's indebtedness as he pours the contents of one test tube into another.

Invention—mental progress—*debt*! No wonder men become weak-hearted. Yet there has come into this office within the week, a letter from a gentleman whose contributions to human progress have not been second, let us say, in mechanical achievement, to those of any man who ever lived. Among other things, he says: "I have stopped inventing mechanical systems, and for the past two months have been trying to invent a system designed to get the farmers out of the hole which Uncle Sam's bad financial mechanism has gotten them into. I do not believe that there is a single banker in this country who understands the great money complex with its countless variables all acting on each other." This man has learned, as thousands of others are beginning to learn, that we are in the Dark Ages of Finance. Only three men, it has been said, ever lived who understood the theory of Finance, and they are dead. Modern Finance, if there is such a thing, dates from 1870. We know more about electricity than we do about Finance. But Finance, strange to say, measuring as it does the value of achievement, like some horrible Moloch, devours whole peoples. Prosperity moves in cycles, the official head of the financial system in the United States has stated, and he adds it is inevitable that there should be periods of calamity, hard money and hard times. That is how much he knows about Finance, and the composite human intelligence knows little more.

So it is stated that Europe, a veritable Aladdin's Palace of wealth compared with what it was even three generations ago, is bankrupt, the exchanges are disordered and thousands starve while food in other parts of the world has been rotting in surplus. Our plea is for intelligence to turn for a moment from mechanical systems and devote itself to the unlocking of the secrets of Finance. We dread a world developed into a Frankenstein. We may conquer the air and the sea and the depths of the earth, change deserts into blooming gardens, but there will be only, at the end, confusion and ruin if we do not learn what Finance is, the rules that govern it, its proper functionings, its sensible control. We do not argue for profit without work, for "easy" money, for unsound issues, and we are well aware of the grave danger of disturbing accepted practices until the faults in them have been scientifically determined. But we doubt if there is a really intelligent man on earth today, who has given the matter any thought, who does not realize that what we call Finance is

a mere makeshift, unattuned to the extraordinary developments that have taken and are taking place. Surely, therefore, it is a task worthy of mankind to attack a problem so vital and win through to a solution.

Progress can liquidate all debts. Waste lands in Africa put under the plow, the Sahara brought into cultivation, the mineral wealth of the Arctic tapped, the hidden oils of earth brought forth, a Muscle Shoals and a Colorado River harnessed to dynamos, fertilizer snatched from the air, atomic energy corralled—there are a thousand ways to transmute liabilities into assets. But these things cannot be done, and progress itself must be constricted and retarded, until we learn, say, as much as the Egyptians knew about the interrelation of debt and labor and public works. If times were hard, they built pyramids and there was labor enough for all. Somebody cries "Finance" and we let three million men skulk in idleness although there is not a state in the Union which does not need more good roads and we have enough public

work to do to keep ten million men busy for years to come.

Aye, indeed we are on the threshold of a new era, as President Harding says, and it is the kind of era that men cannot even vision in their dreams. We have talked with dozens of business men, with scores of thinkers, and the most of them agree that the two big problems we have before us, if man's destiny is to be fulfilled, are Finance and Government. Finance, because we have still to learn what it is and how to keep it in control; Government, because it, too, like Topsy, has "jest growed", and must be made to parallel in efficiency the mechanical progress of the race. There cannot be good government without good morals.

Never before has the future glowed so brightly and appealed so strongly. What a magnificent future it can be! What a splendid future it is sure to be if mankind is willing! We may well be appalled by the very magnitude of its possibilities.

Notable Construction Activities Under Way in the South.

THE volume of construction work in the South placed under contract during the first four months of this year shows a remarkable increase over the amount of work for a similar period in 1921. According to figures compiled from the Construction Department of the MANUFACTURERS RECORD, the aggregate value of contracts reported from January 1 to May 1 is \$150,500,000, whereas in the same period of last year the total value was \$81,700,000. This is nearly one hundred per cent increase and strikingly emphasizes the steady improvement in business conditions throughout the South. In the same period the total value of contracts reported to be awarded was \$370,000,000 as compared with \$277,000,000 for the same period of 1921, or an increase of nearly \$100,000,000.

The activities represented in the total of contracts awarded in the first four months of this year include: Apartment houses and hotels, \$16,000,000; association and fraternal buildings, \$1,700,000; bank and office buildings, \$7,000,000; church buildings, \$7,000,000; city and county projects, \$2,000,000; dwellings, \$5,000,000; miscellaneous enterprises, \$43,000,000; roads, paving and bridges, \$38,000,000; school buildings, \$18,000,000; sewers, drainage and waterworks, \$7,000,000; store buildings, \$5,000,000. During the same four months period approximately \$116,000,000 were provided for in bond issues for roads, schools and miscellaneous public purposes. The railroads of the South too are now coming into the market for equipment and supplies in large quantities as illustrated by contracts awarded by the Southern Railway for cars and locomotives aggregating in value about \$9,000,000.

The activities covered by these totals are not confined to any one section of the South, but from every part of the Southern states are coming reports of renewed construction work in all lines, which is truly reflective of the steady improvement in business conditions. There has been a somewhat remarkable increase in the building of modern apartment houses in the South, and among the cities in which large apartment structures are being erected are: Charleston, S. C., \$300,000 apartment house; Kansas City, Mo., one to cost \$1,000,000; Miami, Fla., an apartment building valued at \$550,000; Washington, D. C., one costing \$1,000,000; Baltimore, Md., one costing \$1,250,000; Roanoke, Va., one costing \$500,000; Atlanta, Ga., one valued at \$900,000.

Quite a number of the Masonic Lodges throughout the South

are also erecting new structures, these including the \$300,000 Scottish Rite Cathedral at Houston, Texas; a \$1,000,000 Shriner's Temple at Atlanta, Ga.; \$725,000 Shriner's Temple at Memphis, Tenn.; a Masonic Temple at Ashland, Ky., costing \$400,000; a Masonic Memorial Temple to George Washington at Alexandria, Va., to cost \$2,000,000; \$850,000 Masonic Temple at Little Rock, Ark.; \$550,000 temple at Danville, Va., and a \$1,000,000 Masonic Temple at Oklahoma City, Okla.

The reports covering the last four months likewise show a large number of important office buildings being erected in all parts of the South. In the City of Greensboro, N. C. the Jefferson Standard Life Insurance Co. has just awarded a contract for a seventeen story office building to cost \$2,000,000; the Exchange National Bank of Tampa, Fla. is to build a \$500,000 structure; the Ashland National Bank at Ashland, Ky. has awarded contract for a \$700,000 home, and the National Bank of Commerce in Norfolk, Va. is going to build a twelve story addition to its present office building, and contract has just been let for a Federal Reserve Bank building in New Orleans costing \$750,000.

Very unusual activity is being shown in the erection of churches in every section of the South, and figures recently compiled show that at the present time over 350 churches are under construction in the sixteen Southern States, at an approximate aggregate cost of \$25,000,000.

The erection of new schools and college buildings is especially noteworthy, and never before in the history of the South has more attention been given to providing the funds to improve educational facilities. Washington, D. C. is erecting two new high schools costing \$300,000 each; Waco, Texas, several school buildings costing \$300,000; Winchester, Va., a \$600,000 school; Oklahoma City has voted \$1,900,000 in bonds for new schools; Birmingham, Ala., is voting on a \$7,000,000 school expansion; the University of Missouri is erecting a number of buildings aggregating in cost about \$300,000; Louisiana State University is arranging for new structures to cost \$4,000,000; the Roman Catholic Diocese of New Orleans has awarded contract for a seminary costing \$577,000; Raleigh, N. C., has voted \$1,000,000 in bonds for a new high school and addition to other buildings; Monroe, La., has voted \$400,000 for new school buildings; Logan County, West Virginia, will spend \$300,000 in adding to its county school system; Roanoke, Va., is arranging to erect a high school costing \$500,000, elementary school \$76,000, junior

high school \$130,000, and improvements to established schools \$150,000; Atlanta, Ga., has under way an extensive plan for school expansion, including two senior high schools, four junior high schools and twelve elementary schools, the estimated cost of which will total \$4,000,000; The Southern College at Lakeland, Fla., has awarded contract for the erection of school buildings costing \$550,000; and the city of Baltimore, has entered into a very extensive plan for the improvement of its public schools, at a cost of many millions of dollars.

Contracts have been reported for building quite a number of new hospitals in various parts of the South. These include: one in Springfield, Mo., costing \$550,000; Soldiers Relief Hospital at Muskogee, Okla., costing \$400,000; Women's Clinic and Pathological buildings at Johns Hopkins Hospital, Baltimore, \$750,000; Church Home and Infirmary, Baltimore, additional building costing \$450,000; Union Memorial Hospital, Baltimore, is laying out entirely new hospital units aggregating in cost \$900,000; St. John's Hospital at Tulsa, Okla., is being erected at cost of \$1,400,000; at Tuskegee, Ala., 26 buildings will be erected for the U. S. Veterans Hospital, aggregating in cost \$1,000,000.

For a long time the South suffered through a lack of modern hotel facilities, but in recent years many new structures have been erected and in the four months period covered in this review quite a number of hotel buildings have been placed under contract. Among the outstanding structures may be mentioned: Hotel Richmond, Augusta, Ga., \$600,000; Francis Marion Hotel, Charleston, S. C., \$1,000,000; South Florida Hotel Co., Palm Beach, Fla., \$500,000; Fountain Inn Hotel, Eustis, Fla., \$400,000; Bon Air Hotel, Augusta, \$800,000; Hanford Hotel, Washington, D. C., \$1,500,000; new hotel at Raleigh, N. C., \$750,000; addition to the San Juan Hotel, Orlando, Fla., \$500,000.

Among the miscellaneous structures placed under contract in the last four months are: Department store of Miller & Rhoads, Inc., Richmond, Va., \$1,500,000; warehouse and office building Belknap Hardware & Manufacturing Co., Louisville, \$1,000,000; Broadway Theater, Richmond, \$300,000; Majestic Theater, Houston, \$500,000; Congressional Country Club, Washington, D. C., \$400,000. At Winston-Salem, N. C., the Winston-Salem Terminal Co. has been organized by the Southern Railway, Winston-Salem Southbound Railway and the Norfolk & Western Railway to erect a \$700,000 union station; the city of Greensboro, N. C., has voted \$1,300,000 in bonds to be loaned to the Southern Railway to erect a new passenger station and construct an under pass.

In addition there are also noted increased activities in the expansion of industrial establishments, which in themselves will be perhaps the strongest evidence of the outlook for improved business conditions. In Baltimore the Western Maryland Railway has under construction an addition to its grain elevator facilities costing \$1,000,000 and just awarded the contract for a big locomotive repair shop; the Pennsylvania Railroad is also adding to its grain elevator at Baltimore, a new addition costing \$750,000; at Galveston, Texas, the Galveston Wharf Co. has awarded contract for adding to the storage capacity of its grain elevators. A municipal grain elevator involving the expenditure of approximately \$700,000 is under way at Norfolk, Va. The Kansas City Cold Storage and Warehouse Co. has awarded contract for a re-enforced concrete cold storage plant to cost \$1,250,000; Freeport Sulphur Co. has placed contract for construction of plant to cost approximately \$2,000,000.

A contract has been awarded for a big irrigation project near Wichita Falls, Texas, to cost nearly \$3,500,000. A number of other important drainage contracts are under way in various parts of the South, including North St. Lucie Drainage District, Florida, costing \$1,000,000; Jefferson County Drainage District, Texas, costing \$1,000,000. The

North Carolina Electrical Power Company is expending \$300,000 for improvements; the Arkansas Hydro-Electric Development Co. is carrying out its project, which will cost \$2,000,000; the Kentucky and West Virginia Power Co. has awarded contract for \$500,000 power plant at Hazard, Ky., and will build one hundred additional miles of transmission lines, at a total cost for all improvements of \$2,250,000; the Houston Power Company, of Alabama, is spending \$300,000 on improvements, and the Carolina Power Co., is building a hundred thousand volt double circuit line and improvements at an approximate cost of \$300,000. Altogether it is estimated that the various hydro-electric power plants in the South have started work in the last four months that will aggregate in cost at least \$40,000,000.

General improvements to the facilities of the Southern Power Co. and the Georgia Railway & Power Co. as now planned and under way involve the ultimate expenditure of many millions of dollars. The Southern Power Co. has awarded contract for the construction of its Great Falls, S. C., and Mountain Island, N. C., hydro-electric plants, and for a large portion of the necessary equipment. The Georgia Railway & Power Co. has resumed work on its hydro-electric project on the Tugaloo River, work on which was suspended owing to the war, and with its completion, the energy output will be increased more than 40 per cent. Hundreds of men are now engaged in this work which started in earnest last fall and will be continued over a period of approximately two years. This is in addition to the general extensions and improvements to existing properties made necessary by the steady industrial growth and greatly increased construction program in the sections served by these companies.

In road building and street paving work the South is showing greater activity than any time in its past history. Contracts as reported in the last four months will aggregate in value about \$40,000,000, and every state in the South is showing a tremendous forward movement in road improvement. Contracts awarded in the first four months of this year include the following: Alabama, \$1,870,000; Arkansas, \$842,000; Florida, \$4,800,000; Georgia, \$780,000; Kentucky, \$870,000; Louisiana, \$932,000; Maryland, \$966,000; Mississippi, \$844,000; Missouri, \$2,735,000; North Carolina, \$7,780,000; Oklahoma, \$1,975,000; South Carolina, \$1,104,000; Tennessee, \$833,000; Texas, \$6,657,000; Virginia, \$690,000; West Virginia, \$4,523,000.

In addition to the actual contracts awarded, there is also a tremendous volume of highway improvements for which plans are being made and for which bids will be taken during the year, so that all together it is estimated that 1922 will witness the greatest period of construction the South has ever had in this type of work.

References which have been made to show the steadily increasing activities in all lines of endeavor throughout the South have necessarily but briefly referred to the scope of this work; only a few instances are given merely to emphasize that in every part of the sixteen Southern states there is coming steady improvement in the business situation and many important projects which have been held in abeyance for several years are now being carried forward and placed under contract, so that the situation throughout the South is more encouraging and the outlook more promising than it has been for many months past. Considering the projects reported and for which contracts will be shortly awarded, it is conservative to predict that the progress already shown in the four months outlined will be duplicated, if not surpassed, in the remaining months of the year.

There is said to be a lot of unrest in the country, which substantiates the old theory that the unemployed never rest.

There never was a good road to nowhere.

THE SOAP MAKERS AND THE TARIFF ON VEGETABLE OILS.

Bureau of Raw Materials
for

American Vegetable Oils and Fats Industries.

Washington, D. C., May 6, 1922.

Editor Manufacturers Record:

I note an article in the "MANUFACTURERS RECORD" under date of April 27, 1922, entitled "Protection will be National Policy—Let the South Participate in Its Benefits."

Without reference to the bulk of the text of that article I am forwarding you the enclosure which is a duplicate of other memorials presented to the Senate Finance Committee and other Members of Congress showing that the soap makers did not endeavor to get tariffs on soap as you have unjustly charged in your article.

I do not suppose that this memorial will receive any attention by you as it is apparent that you have no desire to get the facts relating to this matter for you could readily have secured them from the records of the hearing before the Senate Finance Committee.

I did, however, desire for my own personal satisfaction to place this memorial in your hands as conclusive evidence that the soap manufacturers did not ask for tariffs on their finished products in order that it might not be said that you did not have the facts. You now have them in the shape of this memorial just as you previously could have had them had you made any examination on the records of the hearing before the Senate Finance Committee.

JOHN B. GORDON.

Mr. Gordon need not be concerned about being given a fair hearing by this newspaper. The enclosure to which Mr. Gordon refers, says: "At our hearings before both the Ways and Means Committee and the Senate Finance Committee we stated clearly and emphatically that we did not desire any increase in the Underwood duty on soap and would rather have our finished product placed on the free list than have useless duties imposed on our raw materials."

The position of the soap-makers appears to be quite clear—they were willing enough to have tariff protection, and have had it for years, but the moment it is proposed to give tariff protection also to the manufacturers of raw materials, namely, the farmers who produce vegetable oils, why these same soap-makers come into court and say, substantially, "Oh, well, in that case, rather than have the other fellow protected, we'll do without protection." They are not against protection for their product; they are only against it if the producer is also to get protection. There is a condition precedent to their enthusiasm for free trade.

Indeed, they are not for free trade in soap, at all. Mr. Gordon's enclosure, which he refers to as a memorial to the Finance Committee, specifically states: "We urge that the schedule of rates shown on the last page of this memorial, which are substantially the same as those written in past tariff acts, be adopted" and the last page of the memorial among other things says: "See Brief of the American Soap Industry on page 1277 'Hearings before the Committee on Finance, United States Senate.'" In that brief are found these words: "The rate of duty in the Tariff Act of 1913, which is 50 per cent ad valorem on laundry soap, is sufficient to protect our industry, and we suggest that this rate be not changed in the new tariff provided no changes are made in the rates of duty on our raw materials." Yet Mr. Gordon undertakes to tell us, in his letter, that "the soap makers did not endeavor to get tariffs on soap."—Maybe he thinks 5 per cent is not a tariff.

It is true that, when it became apparent that it was almost a hopeless fight to argue for the retention of some protection for soap and none for vegetable oil, the soap-makers began advancing the proposal that they would rather not have

protection for soap than have it also for vegetable oils, but they had distinctly argued all along for some protection on soap. This is notably true in the case of other than common soaps. We find, for instance, on page 349, Part I, of the "Hearings before the Ways and Means Committee," a request that "the American manufacturer of castile soap should be protected by a direct duty of at least 8 cents per pound."

But how long has it been since the soap-makers began to think that possibly the cheaper soaps did not need much protection? In the Act of 1909 when the Agricultural Bloc had not made protection of vegetable oils a real issue and they were coming in, for the most part, free, we find that these soap-makers were getting 20 per cent ad valorem. It may be assumed that they asked for this high preferential and that it was not crammed down their throats. And makers of fancy soaps were getting as high as 50 per cent protection. Also, when Mr. Underwood wrote his free trade tariffs law, the soap makers somehow managed to get 5 per cent on common soaps and as much as 30 per cent on perfumed soaps, while the makers of vegetable oils, the farmers, were getting nothing. History is against Mr. Gordon. His clients, in this matter, hardly seem to come into court with clean hands.

Indeed, it would be almost proper to question the very name of the organization by which Mr. Gordon is employed. It calls itself the "Bureau of Raw Materials for American Vegetable Oils and Fats Industries." That might lead the casual reader to suppose that it was interested in the prosperity of the vegetable oil producers. But the Bureau, in fact, as is shown in smaller print on its letterheads, is an organization supported by the users of vegetable oils. It is not interested in seeing that the producers of vegetable oils—the farmers—get a fair price, but that the users of vegetable oils get their raw materials cheap.

The facts are quite clear. For years the soap makers have enjoyed protection, under Republican and Protective Tariff laws alike. This protection has been as high as 20 per cent ad valorem for common soap, while raw materials had no protection at all. But now, when the farmers demand that they also be given consideration, the soap makers first urge Congress to give them only 5 per cent protection and the raw materials nothing at all; and then, when that appears dubious, aver that they would rather not have any protection at all than to have to let the farmers have it, too. That is, the makers of common soaps, for it is not controverted that the makers of the fancier soaps always want and get protection.

Our contention is that such a change of policy by the soap makers, after they have enjoyed years of prosperity under tariff protection, is unmoral if not immoral. We are not experts in the ethics of selfishness, but we do know that the agricultural industry in the United States is more important than the soap industry and we do know that it is more important that American vegetable oils sell in a protected market than that some soap makers sell some of their product in foreign lands. Not that the alternative exists, for we are quite confident that America will export soap even after vegetable oils are protected.

The beneficent results of protection are often disturbed by one-sided enactments. Otherwise, the opponents of protection would be inconsequential in number. It would be good policy now for the soap makers to let the farmers have some of the same medicine which has made the soap makers themselves prosperous, that is, protection. We wonder how any sane American should want conditions otherwise. For instance, the Emergency Tariff Act has made the peanut growing industry again profitable in the United States. We think that is a fine achievement, and so do many farmers whose lands, ruined for cotton by the boll weevil, still have a living in them unless the soap makers are allowed to patronize the coolies of China rather than their own fellow citizens.

A WORLD-WIDE ADVANCE IN PRICES NOW UNDER WAY INDICATING WORLD-WIDE TREND TO BETTER BUSINESS.

THE advance which is taking place in prices of farm products and manufactured goods in this country is only indicative of what is taking place elsewhere in the world, and with the rise in prices, there is coming marked prosperity, for there could be no general prosperity so long as prices were unduly depressed. Financial mismanagement in this and some other countries brought about world depression in prices and world stagnation.

The National City Bank of New York in its circular letter of May 22nd says:

"An upward trend in prices is now distinctly visible the world over. There are several ways by which we may test the matter of prices at the present moment as compared with those of a month or a year ago, but these various tests agree that prices at the present moment are higher than they were one month ago and in some cases several months ago. Price index figures as now compiled by the statisticians of the various countries of the world have for the past two or three months hinted strongly at higher prices."

After quoting some of the index figures showing the advance which has taken place, the National City Bank adds:

"These statements showing advances in prices in a dozen principal countries of the world as reported by their respective statistical experts, are confirmed in some degree, by another and entirely different process, namely the prices in the country of production of the articles now entering the United States. The valuations of the merchandise imported are by law the selling price or wholesale prices in the country from which the merchandise is shipped to the United States, and when we find that two-thirds of the articles for which the average import price is named by the Department of Commerce are higher for the month of March, 1922, than in the immediately preceding month or months, it seems to confirm the impression that there is a clearly defined upward movement in prices the world over."

Of the 75 articles in which the Department of Commerce states the average import price month by month, 50 are higher in March than in the preceding month or months. Raw cotton, for instance, imported in March, 1922, averaged 26.3c per pound against 24.9c in February, 1922, and 24.7c in January. Unbleached cotton cloth averaged 20.6c per yard in March against 17.6c in January, and is in fact a higher average than in any month since March of last year. Coffee imported in March averaged 12.4c per pound against 11.8c in February, 1922, and 11.6c in December, 1921; cattle hides averaged in the March 1922 imports 14.2c per pound against 13.9c in February, 1922, and 12c per pound in December, 1921, while goatskins imported in March, 1922, averaged 40.5c per pound against 38c in February. India rubber imports in March of the current year averaged 17.1c per pound against 15c in January, 1922, and 14.3c in December of last year. Raw sugar imported in March averaged slightly more than 2c per pound against slightly less than 2c in January and February, and clothing wool averaged 21.4c per pound in March, 1922, against 19.3c in February, 1922, and 14.2c in October of last year."

Since 1917 the MANUFACTURERS RECORD has denounced the deflation campaign which purposely was put into effect in order to break down prices and we have claimed that there would be no prosperity until prices commenced to advance. This advance is now under way, and that it is world-wide in effect is one of the most hopeful signs of the times. For months we have been telling our readers that the tide had turned and this report of the National City Bank shows that the turn is practically world-wide in its influence.

There is, of course, a possibility that it may run too far. There is already in this country some indication of a growing scarcity of labor in some lines of industry and this may tend to bring about an undue cost, a situation which must be watched very carefully by those who are studying the business outlook.

FINANCING THE FARMER: A COUNTRY BANKER'S SUGGESTION.

IN his address at the opening session of the annual convention of the Maryland Bankers Association in Atlantic City, N. J., May 17 George W. Waters, Jr., president, who is also president of the Citizens National Bank of Laurel, Md., made some impressive suggestions and statements concerning the relation of bankers to the farmers looking to action that would afford the farmers adequate financing such as is extended to men engaged in other lines of industry. Among his telling sentences were the following:

"First and last, big business, and in this I include big banking, has not understood the farmer and his problems and it has made no real effort to understand them. Just as it is at last trying to understand the labor problem in its wider collective aspects so it ought to begin to study the farm problem. The farmer himself suffers from an inferiority complex; he has always kowtowed to the city man and business man and yet your average farmer, to my observation, is usually a man of more native intelligence and force than your average city business man. He does his own thinking and is nothing like as susceptible to mob suggestion as the city man."

"The farmer has forgotten that he is the cornerstone; he lacks leadership. Even the so-called agricultural bloc in Congress is made up mostly of lawyers and not of farmers. Not that I think farmers in Congress will solve the farm problem, but I do think those problems could be solved to a degree if the banker and the business man began to see the farmer as an integral part of the larger world of business and industry. The fact is that the farm problem, like that of business, is one of money and credits. It is essentially a question of banking."

"The logical leader in the agrarian field should be the country banker. Usually he too is something of a farmer. He knows the problems of the farm; he is in close touch with the farmer; and he is at least partly in touch with the larger world of finance and industry. Surely he ought to conceive of his functions as something more than mere money lending; he should take on the same relative importance in country life that the city banker has taken on in urban and industrial life. Banking brains, or brains bought by bankers, are shaping our industrial and business world, but they have neglected the farmer. Let the country banker try to play the same role in the world of agriculture."

"How can we country bankers do it? All I can say is that I have faith that if we ever really tried to do it we would succeed. The most real and worth while job that the banking interests can tackle is the farmer's problem. Here lies the one great factor of safety not only for our civilization in its larger aspects, but for contemporary business in its narrower aspects. The farmer must be put on his feet; he should sit at the first table of the banking and credit resources of this country, and we country bankers can do more than anyone else to put him there, if we wake up to our opportunities and our obligations. In the end the big city bankers may have to show us how."

"I question whether we country bankers are fully alive to the possibilities of the Federal Land Bank System as an agency which we might and should shape to our larger country banking purposes; the country bank models itself too much on the ordinary city commercial bank."

"With all its virtues as a national banking system, the Federal Reserve System does not meet the needs of the farmer. We have seen that system bitterly criticized as favoring the industrialists and Wall Street at the expense of the farmer, and as having thrown a greater burden of war inflation and post-war deflation on the farmer than on anyone else. Much of this criticism is more or less unjust; at least I do not believe there was any such conscious discrimination. Yet it is true beyond all question that the farmers suffered more from these deflation operations than any other class. The fact is that the Federal Reserve Act, while it mobilizes the credit of the country superbly for industry and business generally, does not mobilize it or control it for the farmer."

"Your farmer is the country's best credit risk, and the sum total of available farmer credit is enormous, but it is not a bankable credit in terms of the commercial banks which the Federal Reserve System serves so effectively. The commercial bank wants short term, self-liquidating paper, which business with its quick turnover can supply but the farmer cannot. We country bankers, because of habit and the banking laws, really bank farmer paper as if it were commercial

paper and though it is gilt-edged intrinsically, yet because it lacks the self liquidating and other qualities of good commercial paper we shy at it and under existing bank laws and practices we are compelled to do so. This actual gilt-edged farmer credit should somehow be mobilized.

"Today the automobile, implement, fertilizer, and farmer supply companies are financing farmers' credit needs and are making a large bankers' profit, which the country banks could make if they could operate under a proper credit system. The Federal Reserve System could probably help out by modifying its rediscount eligibility rules to fit farmer requirements, but I suspect that a more comprehensive system will have to be worked out to enable country banks to profitably finance farmers to the same liberal and intelligent and constructive extent that city banks now finance the needs of commerce and industry. It seems to me that some broadening of the Federal Reserve Act for farmer purposes would give more hope of real help than many of the plans suggested for our benefit by the big bankers or the politicians.

"It is said that there are ten billions of unused banking credit available in this country; some means should be found to tap this for the real assistance of the farmer. The problem will not be solved by putting a farmer on the Federal Reserve Board. I should like to see this association start a movement to hold a national convention of rural bankers, pure and simple, in hayseed and homespun, to discuss this problem of the farmer and the country banker."

Mr. Waters hit the nail a heavy blow on the head when he said that the Federal Reserve System did not meet the needs of the farmer. It will be recalled that when that system was being planned and the bill was being drafted for the Federal Reserve Act it was widely touted by its advocates that it would above all other things relieve conditions for the farming community generally. Results have shown conclusively that it does not and cannot do so while in its present form or at least under the control of those who have so grievously mismanaged it during the last several years.

VOTING COMMENDATIONS WHICH DO NOT REPRESENT REAL SENTIMENT.

REFERRING to the fact that at their meeting last week the New Jersey Bankers Association passed resolutions asking President Harding to reappoint Governor Harding as Governor of the Federal Reserve Board, a New Jersey banker of the highest standing writes the MANUFACTURERS RECORD as follows:

"Nobody felt like saying much about it. I was temporarily out of the conference at the time. The vote was a very feeble one of not more than ten or fifteen out of the three or four hundred people there, and I know it was not favored by the majority of those present."

Here is a specific statement that a majority of New Jersey bankers attending the convention did not express their honest convictions, but permitted a small minority to pass a resolution to which they were opposed, and which yet carries the weight of the New Jersey Bankers Association. We wonder how long the bankers of the country will permit themselves to live in this kind of mental slavery.

This scheme is now being vigorously worked wherever bankers meet and few bankers in these conventions have the courage to get up in meeting and oppose this effort to railroad through these resolutions commending Gov. Harding for reappointment. Fortunately for the country President Harding will probably use his own good common sense in the matter and appraise these resolutions at their real value, and that is as so much chaff.

The MANUFACTURERS RECORD has also received from another banker the following:

"I learn through unquestioned sources that a powerful movement is on foot to secure the reappointment of Governor Harding. Behind this movement are tremendous financial and powerful political interests. Those who have reaped fabulous rewards as a result of the policies of the Federal Reserve will utilize every ounce of effort and all the power

at their command to retain Governor Harding and others in office.

"The plan is to have a director of the Federal Reserve attend all state bankers conventions, deliver addresses, and thus crystallize sentiment. The director attending will release his address in advance. Of course, it will be natural to express appreciation for his attendance and his address and incidentally of the policies of the Federal Reserve. This same plan will also be put through the American Bankers Association if possible. In fact, a powerful movement has already been started to get the endorsement of the American Bankers Association. Yet numbers of the bankers who have criticized and condemned in private the policies of the Board are afraid to oppose this movement. They state it will be a bad business policy to raise opposition to it. Many of the bankers unhesitatingly state, 'We are in the Lion's mouth and it would be worse than foolish to make him mad.'

"This movement is even on a wider sweep. It takes in conventions of various organizations nationwide. You will find that efforts will be made to get the endorsement of conventions of various kinds. Governor Harding recently addressed, as you know, the convention of the dry goods people at Birmingham, and stated that agriculture was back on its feet much earlier than was expected, and that all that was necessary was to advertise and send out representatives.

"At the annual meeting of the American Cotton Manufacturers Association at Washington next week an effort will be made to quietly get through a resolution endorsing the policy of the Federal Reserve and incidentally Governor Harding.

"A number of the largest journals in the nation are behind this movement. It is being backed by the greatest financiers. I cannot think that President Harding will reappoint Governor Harding, but those who expect Governor Harding to quietly give up will have a rude awakening."

INFLUENCE OF OIL DEVELOPMENTS IN THE SOUTHWEST.

TEXAS, Louisiana, Oklahoma and Arkansas have more and more come to the front as vast producers of oil, and oil is today the most dominant factor perhaps in world affairs, for it is oil and the struggle to secure oil which is back of much of the politics of Europe and many of the vast financial operations in this and other countries.

The amazing development of the automobile and the motor truck and the flying machine have been made possible through oil, and the development in the Southern States named of vast supplies of oil has been of world wide importance. And yet because of unscrupulous oil stock speculators this industry has in many respects been regarded as a wildcat enterprise. Men are almost afraid to talk of oil discoveries for fear they may be suspected of trying to unload worthless oil stocks upon the public. Essentially important as the industry is, it has always had something of a speculative character, and there has nearly always been connected with any new oil development speculative features of flooding the country with stocks of wildcat enterprises.

The legitimate development of the oil industry in the Southern States has brought about the building of enormous refineries, employing thousands of hands; the construction of thousands of miles of pipe-line creating a vast demand for iron products; the boring of wells has required a supply of machinery which has often taxed the producing power of the makers of this equipment and the transportation of oil by land and by sea has made heavy demands upon the railroads and upon car-building companies, upon tank steamers and upon the shipyards that can turn out tanks. In all the wide ramifications of the world's industrial interests and of politics oil holds a dominating position. It is fortunate indeed that a number of Southern States are among the world's great leaders in oil output, and it is to be hoped that further explorations will from time to time develop new sources of supply in other Southern States in order that this section may continue to hold a leading position in the world's oil industry.

The story told in this week's issue of the development of

an oil field in Texas which has been kept free from the gambling speculator and stock operator, which has been kept free from the tough element which usually flocks to every new oil field, is interesting as suggesting the possibilities of what can be done in other fields where there is a dominating leadership which will suppress lawlessness.

WATERWAYS AND GENERAL DEVELOPMENT IN THE GREAT MISSISSIPPI VALLEY.

A region of limitless possibilities, the great Mississippi valley is today nearer to coming into its own than ever before. Natural resources of wonderful character and dimensions, navigable waterways whose advantages have been realized in only a comparatively small degree, old established cities and towns and villages that only await a broader development which will follow full utilization of the gifts of Providence in order to attain a degree of prosperity unparalleled in their history; these are the things which are to result from the consolidation of forces represented in the Mississippi Valley Association, the purpose of which is to unite all energies for mutual progress throughout the entire area of the Mississippi Basin extending from the Great Lakes to the Gulf of Mexico and from the Allegheny to the Rocky Mountains.

At the recently held fourth annual convention of this Association in Kansas City, James E. Smith of St. Louis, unanimously elected to serve as president of the organization, presented its aims and objects most impressively and laid emphasis upon the duty of the Valley to the Association if all that its inhabitants desire is to be realized. He pointed out that the region contains 64 per cent of the entire area of the United States and 56 per cent of our population; that it produces 70 per cent of our farm products and 45 per cent of our manufactured products; that 64 per cent of the members of the House of Representatives and 60 per cent of the senators at Washington are from this section, which in a joint vote of both branches of Congress has 63 per cent of the votes. Continuing he said that the people of the Valley had not been getting a square deal because of influence directed upon Congress by selfish interests but about nine months ago a group of thirty Congressmen from fifteen different Valley states were invited to a dinner which resulted in an agreement to stand together for a reasonable appropriation for rivers and harbors. A protest was soon made against the appropriation recommended by the Budget Committee of Congress, namely \$13,500,000 and it ended in the amount being raised to \$27,000,000 and still later, in the House itself, the appropriation was again raised to \$42,815,000 in which form the bill passed that body.

With this start in the Valley for improved waterways to supplement the railroads as traffic routes the efforts of the Association have been directed to secure the fullest development of the rivers despite the antagonism of certain railroad interests which have opposed such a movement in spite of the wise utterance of the late James J. Hill at Chicago twelve years ago when he said:

"Nature indicates that the commerce of the middle west, with the rest of the world, should be carried in part by the Mississippi River and its navigable tributaries. The burden which the railroads cannot carry will be shared by the waterways. The congestion arising from a steadily increasing volume of commerce will be relieved by turning over a share of the business to the towboats and the barges. Here lies the most practical exit from our national transportation dilemma."

"Unfortunately," commented President Smith, "we have a class of railroad men who are not endowed with the wisdom, unselfishness, patriotism and other qualities of statesmanship which Mr. Hill possessed, and some of them,

through piratical, unfair and inexcusable methods of competition, have killed off all water transportation on our inland rivers, and in consequence these great avenues of trade are now idle and useless, and even now when railroad officials admit they cannot in future handle alone the great volume of our growing commerce, many of them are still pursuing the dog in the manger policy of preventing the use of our waterways for the purpose for which they were created."

Observing that there is not today one completed waterway project between the Allegheny and the Rocky Mountains President Smith urged the people of the Valley to select men for Congress who will pledge themselves to vote for adequate appropriations for channel improvements on all navigable rivers in the section, as a number of men there have for years been voting against waterway legislation, some of them railroad lawyers and other men subject to railroad influence, while still others followed the dictates of political bosses working in harmony with such railroad influences. The rivers he stated "constitute the Valley's greatest asset."

Illustrating the tremendous economic value of water transportation to the producers of the Mississippi Valley states, which number 27 altogether, Mr. Smith said:

"For instance, a shipment of 250,000 bushels of Nebraska wheat for export was shipped by rail from Omaha to St. Louis several months ago, and carried down the Mississippi River to New Orleans at a saving of \$7500 in freight rates. The Nebraska farmers who raised this wheat probably lived from 500 to 600 miles distant from St. Louis, but they obtained on this shipment the same benefit from the use of the Mississippi River from St. Louis to New Orleans as do those farmers who reside on or near the river."

This illustrates why every man representing any part of the Valley in Congress should support the general plan of waterways improvement. But Mr. Smith went on to show that "had the Missouri River been in use as it should be, this same shipment of grain could have been sent all the way by water from Omaha to New Orleans and the saving would have been at least \$15,000."

On a basis of population like France or Germany he said that the Mississippi Valley would support in comfort and contentment a population of five hundred millions of people; if populated on the same basis as China it would support one billion of inhabitants.

An address by Col. T. Q. Ashburn, U. S. A. Inland and Coastwise Waterways Service, showed what had been accomplished by the barge line on the Mississippi River. "In the face of the bitterest opposition and misrepresentation and criticism," said Col. Ashburn, "it has pursued the even tenor of its way, and is today earning approximately 6 per cent a year on its present day reproduction value." He refuted allegations that figures were padded remarking that "such charges are so ill-founded as to be incomprehensible."

"In the fiscal year of 1922, extending from July 1, 1921 up to and including April 25, 1922, the Mississippi section has carried 570,000 tons of freight at an aggregate saving to the shipper of \$1.35 per ton or \$860,000. In round numbers the total revenue has been \$1,915,000. The total expenses have been, (including \$290,140 depreciation), \$1,708,000, leaving a net income of \$207,000 for ten months, or \$250,000 profit a year or slightly over 6 per cent interest on a \$4,000,000 investment that being the present day reproduction cost of our fleet. A reasonable depreciation on our investment on the Mississippi River is between fifteen and twenty thousand dollars per month and that is what we are going to write off."

As to the service on the Warrior River in Alabama Col. Ashburn said that to make it pay the channel should be deepened to 8 feet, the coal tipple at Mobile should be finished and an upstream cargo trade developed, besides a package cargo trade in both directions, with changes in the boats to fit them for such service. Furthermore, there should be an extension of territory covered by joint rates of the railroads and the barge line, upstream traffic from New Orleans should be developed and the industrial canal between that city and

Mobile should be completed and thus avoid transshipment of freight. Barges designed for steel traffic primarily ought also be acquired and there should be an equitable division of revenue accruing from joint rail-water carriers, between the rail and water carriers. This last condition, he said, was "the sine qua non of success in water transportation."

In conclusion he announced that plans are well under way to acquire 6 steel barges of 400 tons capacity for coal or steel traffic to run between Birmingham and New Orleans and also 5 new oil carrying barges of 3000 barrels capacity each on the Mississippi section.

These statements show what is being done toward developing the possibilities of the waterways but the scope of the work outlined for the Mississippi Valley Association comprises much more than that, covering promotion and protection of the manufacturing, agricultural and general interests of the entire region and the further and complete development of its untouched resources. To attain this end it purposes to enlist the influence and support of all commercial, civic, fraternal and agricultural organizations as well as all public spirited citizens in the Valley. It is a huge plan, but the vigorous work accomplished by the Association since its organization in 1919 constitutes a guarantee that its ultimate purposes will be realized in all their impressive magnitude.

RAILROAD RATES.

IT is obvious that the President of the United States, who is convinced that we are on the threshold of a new era, believes that the new era is being seriously retarded in its beginnings by the rate schedules that in some cases are intolerable. Moreover, it is quite clear that the President is equally convinced of the preposterousness of the legal situation which makes this condition possible. Congress has established two authorities, one of them a rate board and the other a wage board, and the decisions of the former are economically vetoed by the latter. One board thinks that a certain rate is high enough, but the other board fixes a wage which makes such a rate ridiculous. The Railway Labor Board, in other words, has a veto authority over the Interstate Commerce Commission.

It is true that the knot has been more tactfully described by public officials. They say that the I. C. C. cannot establish a fair level of rates because it is restricted by the law which requires that the railroads be allowed a "reasonable return." That provision, in many respects, is one of the wisest ever made by Congress. But the politicians, with the problem stated in that form, see a popular cure in demanding that Congress repeal the "reasonable return" paragraph. That would not solve the problem, because to break down the roads financially would simply be to bring about a still more serious situation, a situation where the machinery of transport would be inadequate to the requirements of the nation's commerce and where ultimately rates would have to be advanced to far above their present level.

The "reasonable return" provision is prohibitive of adequate rate revisions chiefly because, before any return can be figured, an arbitrary and uneconomic wage schedule must be met. Had not a commodity panic been forced on the country, it might readily have supported both the existing rate and wage levels, although even in that case, the Adamson Law would have continued to work grave injustice. What we have now is compulsory labor waste. There are rules and edicts which actually prohibit workmen from doing their best work and require extraordinary payments for trivial service. And the whole machinery of commerce, the very sovereignty of the Government, is held up and checked by the condition. We are aware that labor cost is not the only trouble with the roads, some of which have been grossly mismanaged. But we believe that were the rules of such a character as to favor

honest and faithful work, honest and faithful workmen could earn even more than they now earn and the total cost of labor to the roads be reduced a third. It is not "labor" that is costly, but the lack of it.

The Railway Labor Board should be abolished or made subordinate to the Interstate Commerce Commission. The latter should be authorized by law to notify the former that, after inquiry, it had found that the commerce of the country should properly sustain rates at such and such a level, and that wages must be fixed to permit the roads to operate successfully under such a rate schedule. Unless something of that sort is done trouble is going to pile on trouble and never end. Indeed, it is humiliating to all good citizens to see the nation in such a situation that the Chief Executive must perforce call in the railway executives and beseech them voluntarily to do something which notoriously the law ought to take care of. The logical thing to do would be to follow the first dinner with another, where the autocratic labor chiefs might be asked by the President please to let the railroads function economically, at reasonable cost, and not continue to hold up the commerce of the nation by practising extortion on the vehicles of transport, or better still for Congress to repeal the Adamson Law and the War Labor Board Act and thus permit the railroads to function properly.

BIG NEWSPAPER PLANT TO BE BUILT FOR BALTIMORE NEWS AND BALTIMORE AMERICAN.

THE Frank A. Munsey Company, of New York, has purchased a site of approximately 20,000 square feet at the southeast corner of Center and Courtland Streets, Baltimore, on which will be erected a complete newspaper plant for the Baltimore News and the Baltimore American. The present facilities in the Munsey Building, Calvert and Fayette Streets have been outgrown, hence the necessity for a new and larger plant.

According to Stuart Olivier of the News the site acquired will be occupied by a complete manufacturing plant, two stories high with basement, and no provision will be made for renting offices. The site is now occupied by buildings of the Gardner Dairy branch of the City Dairy, and is bounded by Courtland, Center, Hamilton Streets and Hargrove Alley, fronting 200 feet on Courtland Street and 96 feet on Center Street. It is directly north of the \$2,000,000 17-story office building of the Standard Oil Company, completed several months ago. The location is close to the center of the city, and on one of the widest and best paved thoroughfares for north and south traffic, thus permitting the most efficient distribution of the papers. At present much difficulty is experienced in dispatching trucks with papers because of the severe down-town traffic congestion.

Baldwin & Frick, Keyser Bldg., the real estate brokers for the Munsey interest, were engaged for a long period in seeking a site that has all the advantages necessary, and finally the Courtland street property was purchased. It will be available for use after January 1, 1923, and by that time it is expected that final plans will be completed for the structure so that work of razing the old buildings can proceed and actual construction begin.

No details as to the character of construction, nor of the equipment have been decided on according to Mr. Olivier, who states that this will no doubt be handled entirely in the New York office.

At the Columbus, Ohio, experiment station, the Bureau of Mines has begun laboratory work to determine the rate of casting and dry strength of a cast body, using the kaolins under investigation together with English china clay, Florida kaolin and others. The electrolyte used is a solution of $\frac{1}{2}$ sodium silicate and sodium carbonate.

Remarkable Oil Field Developed at Orange, Texas.

FREE FROM THE USUAL SPECTACULAR FEATURES OF OIL BOOMS.

By ALBERT PHENIS.

Orange, Texas, May 15.

Here at Orange is possibly the most astonishing oil development the world has ever known, when viewed from all standpoints. That is the opinion of seasoned oil men and it coincides with such personal knowledge of fields as I possess. For one thing, it is an altogether mild and gentle boom; no crowded trains or hotels, no heated surging mobs of speculators, no excited natives, no extortionate prices in the restaurants, among automobile men or anywhere else. Even in the oil field town of some 5000 people, which has sprung up around the derricks, six miles out from the city limits, there is a quiet, orderly community, free from the violence, gambling, drinking, and lawlessness which in previous Texas experience have brought to new oil towns something of the atmosphere and semi-barbarism that saturated the old-time Western mining camp. This is so contrary to conditions in all other big oil developments in the past that it seems to merit the opening sentence of this letter.

Getting off the train the other morning, an old oil man glanced at the tranquil, unagitated crowd around the depot and asked if he had not been put off at the wrong station. Being reassured, he drove off to the hotel, and along the placid streets his eyes fell upon stately homes and fine church buildings, one after another, so that by the time he had entered the peaceful, quiet hotel, his amazement had grown beyond all bounds, for never in all his life had he encountered an oil town that presented such scenes.

And all the while they are doing big things in the oil field, and nobody is excited about it, any more than if it were a rice farming operation, and the world at large hardly even knows that Orange has an oil field. Yet the bigness of the development here is demonstrated by the fact that there are approximately 200 rigs in the field; there are some 70 producing wells, and there are numerous new drilling operations under way; there is a daily production of 19,000 to 20,000 barrels, and this is said to be only about one-half the capacity of the wells. The wells sand up easily, which causes an intermittance in flow. Therefore, the production would be on toward 50,000 barrels a day, so it is stated, were all the wells producing to capacity.

Furthermore, oil men of large experience declare that so far only the outer edge of the field has been penetrated, and by these it is predicted that one of the greatest fields of the country is destined to be developed here. While the prolific sands seem to be those of the 3100-3300 and 3700-3900 feet strata, oil is found in 18 different sands in the present Orange field, at depths ranging from 1772 to 4600 feet. From this fact, and because of the enormous gas pressure, the large amount of water present, and the tendency of the wells to sand and paraffine up easily, it is deduced that present operations are in a "blow-out" on the edge of the true and greater field. Fewer strata of oil sands, and they of firmer structure, are expected to be found when the main field is located. Indeed, the very significant opinion is held by some that, unlike most other coastal oil fields, the oil here does not lie on salt domes, but is on a true geological structure. It is impossible to over-estimate the importance of the situation should further developments demonstrate that this is the fact.

The present development is on Cow Bayou, west of Orange, with proven territory a mile and a half long by a mile and a quarter wide. There is an almost utter absence of geological data on which to form definite conclusions. The State of Texas has no geological survey, and the United States has done nothing here since the

Spindle Top development of twenty years or more ago. However, with such geological facts and indications as are at hand, and with the logs of the Cow Bayou wells as a guide, the belief exists here that the oil formation tends to the southeast from Cow Bayou, then turns north by west after crossing Adams Bayou, and extends to and beyond the northern boundary of Orange county. In this belief a well is being sunk five miles to the northeast of the present development and locations for four new operations have just been made from four to eight miles from the field.

One strong reason for the serenity that surrounds the situation is said to be the fact that wildcatting is practically unknown. Early in the development the big companies got into the field in force, and proceeded with great diligence and vigor to acquire leases on the lands. These leases are not for sale, and wildcatting is never attractive where large boundaries are not to be obtained. Without opportunity for trading in leases, furthermore, the fertile field for the speculator does not exist, and there probably never was a field developed in which the fraudulent and mushroom operator was so entirely absent as at Orange. No screaming appeals to invest in stock of Orange oil companies appear in the local newspapers or anywhere else, simply because that kind of an oil company does not exist and possibly never will. As a matter of fact, oil men declare that the day of the shoestring oil operator is practically drawing to a close; that the oil business is gradually getting into strong hands, and point to the fact that in well nigh every county in Texas, oil leases have been taken on the lands, so that opportunities to win fortunes of \$40,000 to \$50,000 on an investment of one hundred dollars or so, as has been done sometimes heretofore, will, it is claimed, soon have become a thing of the past.

Although the oil development at Orange is of recent date, really starting in an important way with the bringing in of the Humble Chesson well No. 5, on December 27 of last year, oil has been known to exist here for more than 40 years. At that time a farmer started a well to get water. At 14 feet the hole filled with a dark, black oily substance. As he was not looking for oil and had no use for it, he filled the hole up in disgust, sought a new location, and gave the matter no further thought.

It is a singular thing that in so many ways do "coming events cast their shadows before"; that so often are well known facts passed up as of no general concern, until some peculiar combination of circumstances forces universal recognition. The world today is almost radio mad, so great is the popular craze for wireless music and speech. And yet the small boys of the towns and cities have been "listening in" for a decade or more, and even Marconi's achievements were antedated a score of years by Nicola Tesla. Long before Capt. Lucas astonished the world by bringing in the first gusher well at Spindle Top, a local seer named Patillo Higgins had plotted and mapped an oil city at that very site, and without exciting the public at large, had indicated the presence of oil exactly where it was afterwards brought in.

It was not till the Spindle Top days that any further thought was given to the Orange field, and even then some shallow wells, which failed to reach the oil, marked the extent of experimentation at that time. In 1913 a well was sunk some distance north of the present field, and a small well, known as the Rio Bravo, was brought in. As demonstrating the relatively long life of the coastal fields, in comparison with some others, it is a fact that the Rio

Bravo is still a producer with a yield of some 80 barrels a day. In 1921, some local people made another attempt, and in April of that year oil was found. Great activity did not occur, however, until the bringing in of the Humble Chesson No. 5, which was sunk to a greater depth than any previous well in the field—3965 feet. This remarkable well, among the greatest this country has known, has produced to date 1,257,000 barrels of oil and is still flowing at the rate of approximately 1000 barrels a day.

Oil from the Orange field is piped principally through six lines leading to Beaumont, although as is usual in Texas oil fields, on account of the practically impervious nature of the gumbo that prevails, earthen tanks have been employed, in which there are stored from 1,000,000 to 2,000,000 barrels of oil. No important steel tankage has as yet been erected here, there being nothing of that kind so far beyond two tanks of 10,000 barrels each. Two pipe lines extend to the Sabine river here, and two tankers have thus far been loaded at the Orange wharfs. The Humphreys Pure Oil company proposes to erect a refinery on the Neches river, at a point which is only eight miles distant from the Orange field. Orange wants refineries established here, but so far no definite steps have been taken to that end.

With the bringing in of the Humble Chesson No. 5, the great activity in leasing and drilling commenced. The one road leading to the field was soon so cut up, with the heavy hauling and the winter rains, that it became impassable, mules having been actually drowned or smothered by the mud into which they sank. Much machinery and quantities of supplies were hauled by boat and barge through the bayou—a tedious and time-consuming trip. Then the business men of Orange got together one day in February, and in one hour and forty minutes subscribed \$70,000 to build about six miles of plank road, from the city to the oil field and upon the principal streets of the oil field town, thereby making possible the expeditious development of the field.

Recently a bond issue of \$700,000 has been voted to construct a concrete roadway from Orange to the field, and the work will be pushed without delay.

Law and order at the oil town were not entirely a spontaneous growth. The vigorous young Mayor of Orange, an ex-service man named William E. Lea, took time by the forelock and installed enough peace officers to spot and turn back at the depot every disreputable character, male and female, who attempted to leave the train at Orange. Mexia had had a galling experience with such scum, and when they were finally driven out, Orange was considered by them as an inviting field. Among the officers Mayor Lea secured were men who knew the Mexia refugees by sight, so they were never permitted to gather here in force. Through co-operation with the county authorities, the morals and welfare of the field town folk were looked after with much care. A community house and social center, as well as a church, were established there, and sanitary supervision is carried out by the county. The ever-present Salvation Army is in evidence, there are families living there, and stores of various kinds supply the community needs. The Southern Pacific is building a spur track to the town, thus rounding out the facilities afforded to this notable feature of the most remarkable development probably ever known in the history of oil fields anywhere.

\$800,000 Contract Awarded for Bank and Office Building at Richmond.

Richmond, Va., May 20—[Special.]—John T. Wilson Co., Inc., of this city, has been awarded the contract for erection of an office and bank building for the Richmond Trust Co., at a cost of approximately \$800,000. Starrett & Van Vleck, of New York City, are the architects for the structure which will be of granite, limestone, concrete, brick and steel frame.

Open Shop Coal Mines of West Virginia Steadily Winning Out.

Charleston, W. Va., May 18—[Special.]—More coal is being produced in West Virginia by open-shop mines, despite a strike, than was produced during the corresponding period of 1920 when virtually all the mines in the state were at work. By the middle of May the output of West Virginia mines had grown to 1,520,650 tons, the figures given representing an increase of 85,500 tons over the preceding week. When the strike became effective on April 1 only 414 mines out of the 1421 in the state were able to operate. By the middle of the month, the number of mines in operation had almost reached the 700 mark. In other words half of the mines in West Virginia today are operating and are operating on an open-shop basis because the union has declined to permit its men to accept employment and wherever miners have gone to work it has been in open-shop mines.

Instead of gaining strength since the inception of the strike, the United Mine Workers organization has steadily lost ground. Not only has it failed to make any headway in organizing the non-union fields of southern West Virginia, but it has been unable to hold its own men in line, as attested by large numbers of striking miners who have returned to work in the New River and Kanawha fields within the last few weeks, there having been almost a complete suspension of operations in these fields during the first few weeks of the strike. Funds have been lacking to carry on the work in the Winding Gulf and other non-union territory where a drive was launched during the first week of the strike and the men who joined the union in the Gulf region during the early days of April have gone back to work. It is acknowledged in fact by union leaders that it is useless to try to organize the non-union fields in the southern part of the state especially at a time when the morale of the striking miners is none too satisfactory owing to the fact that the union is unable to afford relief, notwithstanding the large sums paid into the union through the check off.

Some of the strike leaders have sought to create the impression among the striking miners that not more than four or five hundred men are mining coal in West Virginia when as a matter of fact the non-union districts including the Pocahontas, Tug River, Winding Gulf, Logan and Thacker fields are producing about 1,200,000 tons a week.

More significant however perhaps is the fact that fully one fifth of all the mines in northern West Virginia are now in operation on an open-shop basis. There are in the northern part of the state, excluding the Northern Pan Handle and the Upper Potomac districts, 550 mines and of that number about 120 are now producing coal as against only 60 at the beginning of the strike. Most of the mines in northern West Virginia now in operation are small in size but the production of such mines is growing from day to day. For a time after the strike order became effective, lack of demand retarded a large production but since the supply of coal in various markets and industrial centers began to dwindle there has been a more urgent demand and producers are not able to supply it, with the result that there has been a pronounced advance in prices, although the more conservative operators have been discouraging too marked an advance. At the time this is written both high and low volatile coals in all grades are commanding a price of not less than \$4 a ton.

C. C. Pierce, 529 Law Bldg., Norfolk, Va., has been awarded the contract for erection of an apartment house for the Breckingham Corporation, Norfolk, at a cost of \$140,000. Plans were prepared by Philip B. Moser, architect of Norfolk.

Remarkable Church Building Activity Throughout the South Involving Over \$25,000,000.

The South is spending \$25,000,000 or more in the erection of church buildings, and no better illustration could be given of betterment in business affairs and the consecration of the money that is being made to the advancement of mankind than the way in which this section is pouring millions into the building of churches and schools and hospitals and kindred activities, looking to the advancement of humanity.

During the last eight months, as reported from week to week in the Construction Department of the MANUFACTURERS RECORD, 360 church buildings have been completed or started in the South, each involving a cost of over \$10,000, with a total outlay of more than \$23,000,000. If to this were added the improvements costing less than \$10,000 to existing churches, and for building of smaller churches, the aggregate would run to over \$25,000,000 as the record of the last eight months.

Even these figures, great as they are, do not begin to tell the whole story, for there are many church buildings, large and small, for which plans are being made and for which a considerable proportion of the money for construction has been raised. Indeed, plans have been announced for scores of churches involving an aggregate expenditure of millions of dollars which will be under way in the near future, but the cost of which is not included in the foregoing figures.

During the past 17 weeks contracts have been let in the South for churches at an aggregate cost of \$6,776,000, and as the final cost always largely exceeds the contract price, these figures could be easily increased by 50 per cent and still be conservative, for these estimates as to \$25,000,000 now going into church buildings, or the \$6,700,000 of contracts in the last 17 weeks, do not include the cost of equipment or furnishing or other expenses, but simply the contract price for the buildings themselves.

In addition to the 360 church buildings reported as representing, with the small structures, a cost of \$25,000,000, there are scores of churches which have been completed, or which were started in the summer or fall of 1921 and which are not included in these figures. Many structures are so costly and of such an imposing architectural nature that they have been in course of construction for eighteen months or more. A great many of the churches now building are but a part of the ultimate unit, for some congregations are simply erecting the foundations for the main structure, or Sunday School buildings which will be used until the main structure has been completed.

Many of the buildings now under construction are of

impressive and beautiful architectural effect, embodying all the newest ideas in church equipment and facilities. Several churches on which the preliminary work has begun, will cost \$500,000 or over. Some buildings recently erected or now going up are fireproof, steel frame, brick, stone, stucco, terra cotta, or limestone finish, with slate, tile and copper roofs much in evidence, while the interior furnishings and decorations are in keeping with the main structure. Wooden buildings are not being erected for church purposes, except in country districts.

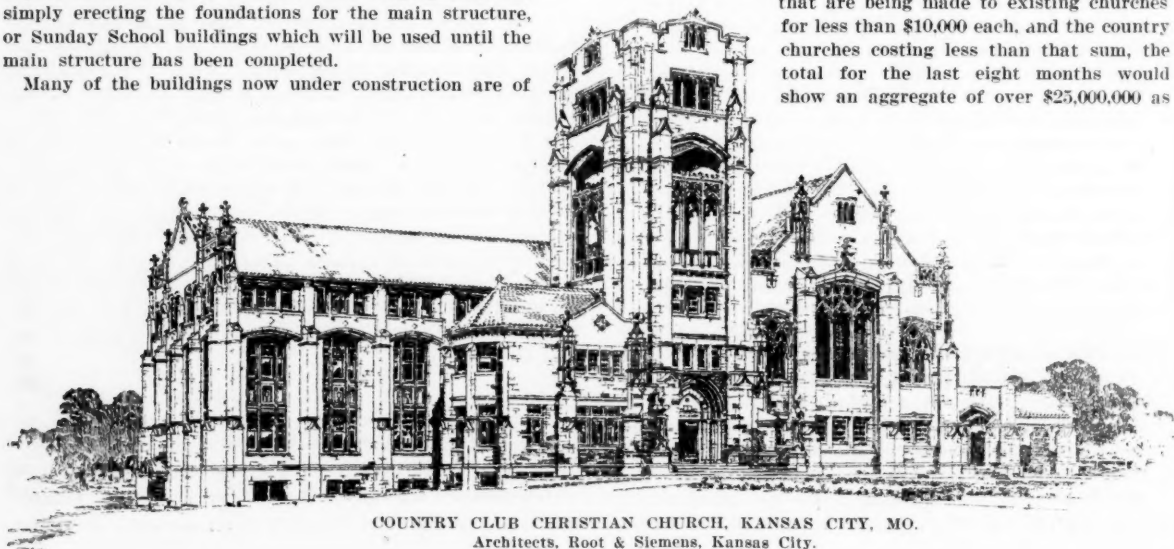
The figures on the number and cost of the church buildings which have been reported in the South during the last eight months, have been compiled from our Construction Department beginning with September last, and these figures are based upon reports from architects, contractors and pastors in the sixteen Southern States and the District of Columbia.

In addition to these activities now actually under way, there are many tentative plans in the hands of architects and contractors which will be released in the near future for immediate construction work. Every mail brings to this office many letters of contemplated church buildings as well as of contracts actually let, and the indications are that what the South is now doing in church building is only suggestive of the still greater activity which will be seen in the near future.

A summary for church building in the South during the last eight months of structures costing \$10,000 or over, as compiled by the MANUFACTURERS RECORD, is as follows:

State	Number of Church buildings	Estimated Cost or Contract Price
Alabama	14	\$ 698,375
Arkansas	19	983,000
District of Columbia	7	649,800
Florida	19	1,439,000
Georgia	15	722,000
Kentucky	9	442,000
Louisiana	12	1,282,520
Maryland	19	1,409,000
Mississippi	11	519,000
Missouri	35	2,015,500
North Carolina	43	2,934,000
Oklahoma	20	1,580,500
South Carolina	15	527,000
Tennessee	32	1,800,000
Texas	44	3,975,400
Virginia	29	1,458,500
West Virginia	18	1,177,000
	361	\$23,612,505

If, as stated, we add to these figures the improvements that are being made to existing churches for less than \$10,000 each, and the country churches costing less than that sum, the total for the last eight months would show an aggregate of over \$25,000,000 as



COUNTRY CLUB CHRISTIAN CHURCH, KANSAS CITY, MO.
Architects, Root & Siemens, Kansas City.



FIRST BAPTIST CHURCH, SHREVEPORT, LA.

Cost \$500,000: Architects, C. W. Bulger & Son, Dallas, Clarence W. King, Shreveport, Supervising Architect in charge; Contractors, Garson Bros, Shreveport.

the actual cost of construction work and not including the full cost which must include the amount to be spent for church furniture and equipment.

No better indication can possibly be given of the advancing wealth of any community, and the higher standing which is obtaining in religious and educational work than in the expenditures that are made for the building of churches and schools and hospitals and hotels. In these four items there is remarkable activity throughout the entire South.

As typical of some of the larger church enterprises under way in this section during the last eight months we give a few illustrations of some of these superbly beautiful structures.

At Dallas, Texas, one of the most costly structures being erected in the entire South is that of the First Methodist Episcopal Church South, which when complete will have entailed an expenditure of \$850,000. Plans for this building were prepared by Herbert M. Greene Co., of Dallas, and the foundations have been completed. Another imposing structure is that of the First Baptist Church of Houston, ultimately to cost \$600,000. The work now under way will cost \$200,000. C. D. Hill & Co., of Dallas and Houston, are the architects, and Tom Tellepsen, Houston, the contractor. The plans call for a floor area of 104 by 325 feet, divided into two office buildings, each 62 by 104 feet, on each end. The first floor of one of these will be used for Sunday school purposes. Later these wings which will be four stories high, will be raised to 12 stories, the foundations having been constructed to carry an office building of that height. The auditorium of the church proper, located between the office buildings is 201 by 104 feet. The building will have a steel frame, concrete fireproof walls with terra cotta trim, stone basement and stone trim for church proper. The work on the first unit is well advanced.

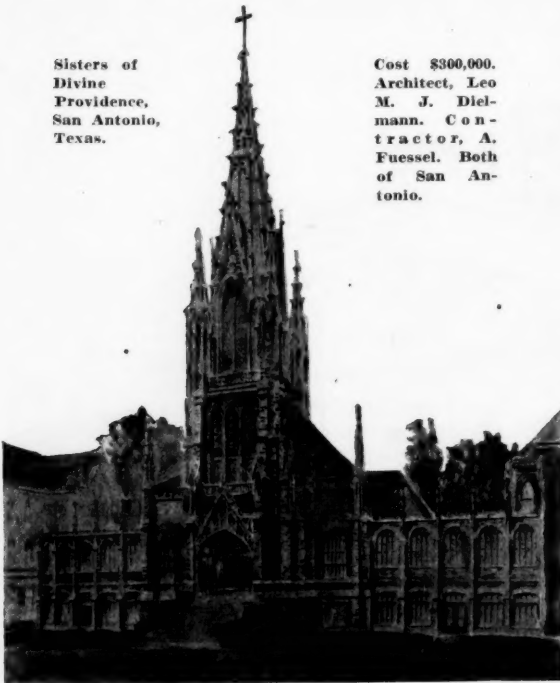
The new \$500,000 building of the First Baptist Church of Shreveport, La., used for the first time April 9, contains features heretofore unknown in church architecture. A 10-

story tower, together with connecting rooms in the annex furnishes quarters for a Sunday school of 3000 and 12 young peoples societies. One of the first radio broadcasting stations in the world owned and operated by a church is installed in the tower, and sermons, lectures, musical concerts, etc., will be broadcasted daily. The auditorium has a seating capacity of 3000, and will be used as a civic and educational center, being fitted with costly organ, an echo organ and a chime connection. A roof garden with accommodations for 1000 forms the fourth floor of the main building, and will be used during the summer for out-door services, musical concerts and social gatherings. A banquet room will seat 500 at two tables. A gymnasium is located on one of the upper floors in the tower; a fully equipped nursery is in the basement, under the supervision of a nurse who will care for the children while their parents are at church or while shopping. A dining room will serve lunch to several hundred working girls daily. A 13-bell chime occupies the ninth floor of the tower. The structure, uniting the main building of four stories and the tower contains 51,000 square feet of floor space, and it is in use every hour of the week, 10 workers being employed to supervise the various activities. The church architects are C. W. Bulger & Son, of Dallas, Texas, with Clarence W. King of Shreveport, supervising architect. Garson Brothers of Shreveport are the contractors.

At a cost of \$400,000 All Souls Church, Unitarian, is being erected in Washington, D. C., after plans by Coolidge & Shattuck, Boston, Mass. Boyle-Robertson Construction Co., Washington, are the general contractors. The Colonial style of architecture is used. The approach to the church is by a monumental terrace up broad flights of steps and through a portico with tall Corinthian columns surmounted by a pediment, above which rises a graceful spire. The auditorium is typical Colonial style with barrel-vaulted ceiling supported by columns. The organ and choir gallery are above the entrance vestibule, and there also are side galleries. The maximum seating capacity will be over 900, of which

Sisters of
Divine
Providence,
San Antonio,
Texas.

Cost \$300,000.
Architect, Leo
M. J. Die-
mann. Con-
tractor, A.
Fuessel. Both
of San An-
tonio.



666 will be on the main floor and the remainder in the galleries. Wing buildings of two stories and basements house the social and educational facilities; they extend a considerable distance to the street back of the church proper, being united by a narrow one story building enclosing an open court which will have a cloister and garden. The basement is planned to house the recreational activities, the gymnasium and swimming pool. The group will be constructed in Colonial materials, dark red brick and light stone.

The Independent Presbyterian Church of Birmingham, Ala., is erecting a \$120,000 Sunday School building, after plans by Warren & Knight and Miller & Martin, architects. The general contractor is the Smallman-Brice Construction Company. It will be used temporarily as a church. The construction materials are local stone with Indiana limestone trimmings.

The First M. E. Church of Florence, Ala., is erecting at a

cost of approximately \$150,000 a structure 67 by 124 feet with a wing on the west side. The main auditorium is 90 by 66 feet with balcony and ceiling height of 31 feet. The Sunday School department is 45 by 88 feet, three stories and basement. It is of red face brick with Indiana buff stone trim, and red Spanish tile roof. Plans were prepared by the Board of Church Extension of the M. E. Church, South, Rev. J. A. Baylor, Architectural Secretary. L. E. Tate, of Florence, Ala., is the general contractor.

Contract for the erection of the \$600,000 structure for the First Baptist Church of Dallas, Texas, after plans by R. H. Hunt Co., of Dallas, will probably be awarded in July. This will provide for a church and Sunday school building, the church to be of three stories and the Sunday school unit of seven stories, 128 by 236 feet. It will be of fireproof construction with tile and composition roof, and floors of steel, wood and concrete.

A \$130,000 church and Sunday School group is provided for the Baptist Church at Paris, Tenn., with the recent award of the contract to Ernest Barbour to supervise construction, after plans by Brinton B. Davis, architect of Louisville, Ky. The architecture is Grecian Ionic, the building being of brick and stone, with steel frame and roof trusses and tile roof. The seating capacity of the auditorium is 1000, that of the Sunday School is 600.

St. Mark's Episcopal Church at Richmond, Va., in its entirety involves the expenditure of \$140,000. A portion of the upper interior and the basement, but omitting the steeple, has just been completed at a cost of \$57,000 by Claiborne & Taylor, Inc., Richmond, general contractors, after plans by Baskerville & Lambert, Richmond. It consists of a brick building with a slate roof supported on curved steel trusses, and is of purely Colonial type architecture, the

brick being laid in Flemish bond with white mortar. The water table, front steps and portico columns and pilasters are of pre-cast concrete.

The Sunday School unit of Barton Heights Methodist Episcopal Church, South, at Richmond, is being erected at a cost of approximately \$75,000, the complete plans for the church and Sunday school buildings involving the expenditure of about \$200,000. Plans were prepared by Charles M. Robinson, architect, of Richmond, and Davis Bros., Inc., are the general



FIRST METHODIST EPISCOPAL CHURCH SOUTH, DALLAS, TEX.
Cost \$850,000: Architects, Herbert M. Greene Co., Dallas.



A TYPE OF COLORED CHURCH.
Bethel A. M. E. Church, recently completed at Columbia, S. C. Cost \$80,000. Architect, J. N. Lankford, Washington, D. C. Contractor, Coughman Contracting Co., Columbia.

construction in Baltimore. The buildings of the Church of the Messiah, Protestant Episcopal, being erected in the Harford Avenue section, will cost approximately \$200,000. They consist of a church building 52 x 122 feet and a parish hall 48 x 114 feet. The buildings are of Gothic design, of Woodstock granite and cast stone trimmings with slate roofs. Mottu & White are the architects and the Consolidated Engineering Co., both of Baltimore, are the general contractors. The new building for Oheb Shelom Congregation involves the expenditure of about \$200,000. It is a 4-story structure, 50 by 135 feet of Colonial architecture, with an assembly capacity of 700 persons, 15 class rooms, kindergarten department, library and study. Benjamin Frank is the architect and the West Construction Co. are the general contractors, both of Baltimore. The University Baptist church completed the first unit of its plant last winter, a Sunday school building at a cost of about \$90,000, to be followed later by the erection of its main structure.

The Country Club Christian Church under construction in Kansas City, Mo., after plans by Root & Siemens, architects of that city will when finished be one of the most modern church buildings in that section of the country. The cost is placed at \$300,000. The unit now building will be the Sunday school and parish house, and will be temporarily used for church purposes but later fitted up for its permanent use. The church plant in its entirety will have fully equipped dining rooms, kitchen, parlors, scout rooms, and a church auditorium seating 1200 to 1500 persons.

At Gastonia, North Carolina, there is nearing completion a \$150,000 structure for the First Baptist Church, after plans by Willard G. Rogers, Charlotte, N. C. Brown-Harry Co., Gastonia, are the general contractors. The structure is of Roman type architecture, of stone, brick and tile construction, with steel frame and trusses and a tile roof.

A number of large and costly Catholic churches are being erected in the Southern states. The most imposing of these is probably the Church for Sisters of Divine Providence, at San Antonio, costing \$300,000, and for which Leo M. J. Diemann, is the architect. A. Fuessel is the general contractor.

contractors. A Sunday school building has just been completed for Ginter Park Methodist Episcopal Church by O. C. Peers, contractor, after plans by Charles M. Robinson.

This is to be a part of the ultimate church group. Each of these schools have been designed upon modern lines, giving individual class rooms and assembly space for the various departments.

A large number of church buildings costing from \$40,000 and upwards are being built or are planned for early future

This building is 176 feet long and 116 feet wide with a tower height of 190 feet. The main floor of the chapel is raised 12 feet above the grade, and under it is a large auditorium with an 18 foot ceiling for students, completely fitted up with stage, etc. The church will be connected with the college buildings and other units by corridors, each 200 feet long. The floors will be of marble and tile. All finish, trim and pews will be of quartered oak, and a \$20,000 marble altar will be installed. The seating capacity is 1000. Chimes will be placed in the belfry and a clock on the tower, and a fine organ installed. A radio outfit will also be a feature.

St. Joseph's Catholic Church, at Thibodaux, La., costing \$250,000, has a seating capacity of 1200 persons, and in addition a new rectory is in course of erection costing \$35,000. Burton & Bendernagel, New Orleans, are the architects and Jos. A. Robichaux, contractor. The buildings are of steel frame with stone and face brick finish.

The Church of the Holy Name, Miami, Fla., is planning to expend upwards of \$500,000. The main building is 92 by 135 feet, of fireproof construction, with a rectory four stories high, 30 by 80 feet. Plans have been prepared by O. J. Williams, architect of West Palm Beach.

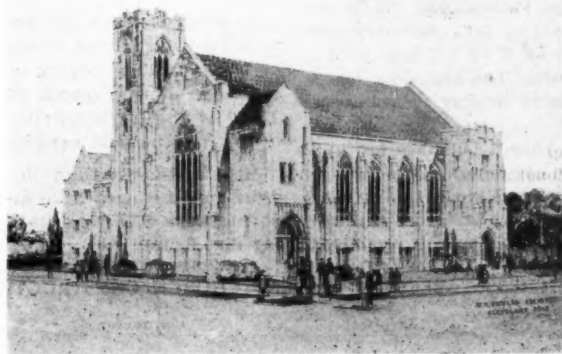
A church auditorium and education building estimated to cost \$150,000 is proposed for the First Baptist Church of Muskogee, Okla. Plans have been completed by R. H. Hunt

Co., of Dallas, Texas, and the ground purchased, but the contract will not be let for several months.

A \$150,000 expenditure is being made by the Guardian Angel Church of Kansas City, Mo. H. W. Brinkman, Emporia, Kans. is the architect, and all the work is being done by day labor. The basement has been completed and the remainder of the work is being pushed. The church is pure Gothic in style, with the tower in the rear, deviating in this respect from the general line of similar buildings.

The church building of the First Baptist congregation in El Dorado, Ark., now about

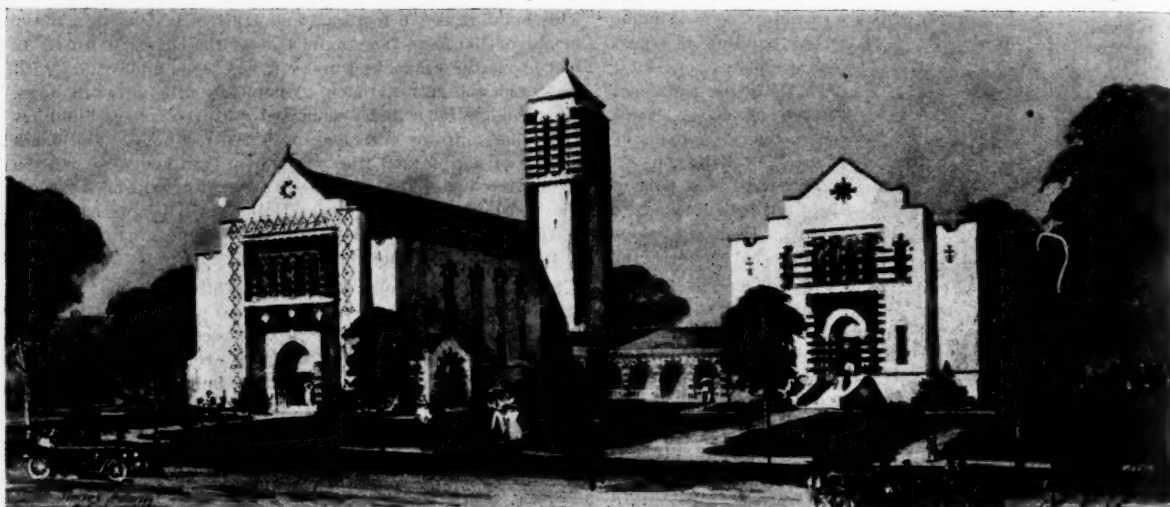
one half complete will cost approximately \$175,000. Dougherty & Gardner, Nashville, Tenn., are the architects and Stewart-McGahee Construction Co., of Little Rock, Ark., are the general contractors. The building is of brick and steel construction with face brick, terra cotta and stone exterior, and a tile roof.



CHRISTIAN TEMPLE, NORFOLK, VA.
Cost \$250,000. Architect, W. H. Nicklas, Cleveland, Ohio.



BARTON HEIGHTS M. E. CHURCH, SOUTH, RICHMOND, VA.
Cost \$200,000. Architect Charles M. Robinson, Richmond; Contractor, Davis Bros. Inc., Richmond.



GINTER PARK M. E. CHURCH, SOUTH, RICHMOND, VA.

Architect, Charles M. Robinson, Richmond; Contractor, O. C. Peers, Richmond.

In St. Louis, Mo., the First Presbyterian Church will erect a \$150,000 structure after plans by Jos. H. Senne, architect, of that city.

Work is proceeding rapidly upon the Bethesda Methodist Protestant Church at Salisbury, Md., involving the expenditure of \$125,000. George E. Savage, Philadelphia, Pa., is the architect and Hastings & Parsons Co., Inc., Salisbury, are the contractors. The building will be 80 by 137 feet, with a basement under the entire structure. The first floor has a minister's study, business office, main Sunday School room, etc.

In the State of Texas alone 44 church buildings are now being erected, or will soon be let to contract, involving an expenditure of \$3,975,400. Of this number eleven will cost more than \$100,000 each. In Dallas one church structure will cost about \$850,000, and another in the same city will cost about

the same amount, although the contract for the latter has not yet been let.

Big expenditures are being made for church buildings in El Paso, San Antonio, Houston, Waco and elsewhere throughout the state.

In North Carolina the number of churches in this report is 43 involving a total contract price of \$2,950,000, with nine of these buildings costing over \$100,000 each. In Asheville the value of new church structures approximates \$750,000. There is also much activity in other towns of the state in church building and extension work.

Missouri stands third in this summary with 35 church structures costing a little over \$2,000,000, with Kansas City having about \$750,000 of this and St. Louis closely approaching that figure.

ACTUAL PROGRESS TABLES OF PRESENT CHURCH CONSTRUCTION SOUTH.

City and State	Church	Architect	Contractor	Status of Work	Cost
Alabama					
Anniston.....	Church of Christ.....			Under way soon.....	\$36,000
Auburn.....	Episcopal.....	Frank Lockwood.....		Just started.....	50,000
Birmingham.....	West End M. E.....	T. L. Brodie.....	R. A. Davis.....	Plans ready.....	25,000
	Harmony Baptist.....	W. A. Rayfield & Co.....	Tri-State Con. Co.....	Well advanced.....	120,000
	Independent Presby.....	Warren & Knight.....	Smallman-Brice Const. Co.....		
	Mt. Pleasant M. E.....	Miller & Martin.....		Contemplated.....	29,000
	Bethel Baptist.....			Well advanced.....	30,000
	Bethel Congregation.....			Purchased site.....	150,000
Brighton.....	Shiloh Baptist.....	W. A. Rayfield & Co.....	Tri-State Con. Co.....	Good progress.....	16,000
Decatur.....	First M. E. South.....	T. L. Brodie.....		Award soon.....	20,000
Fairfield.....	First Baptist.....	J. E. Greene.....	T. A. Wilson.....	Complete.....	60,000
Florence.....	First M. E. South.....	Bd. of Church Ext.....	L. E. Tate.....	50% complete.....	92,375
Fort Payne.....	M. E. South.....	L. M. Weathers.....	R. J. Chitwood.....	Partly complete.....	20,000
Grand Bay.....	Methodist.....			Start in fall.....	15,000
Montgomery.....	Trinity Presby.....	Frank Lockwood.....	Crampton Lumber Co.....	Just begun.....	35,000
			Jeffers Const. Co.....		
Arkansas					
Carlisle.....	First Methodist.....	John P. Almand.....	C. H. Reid.....	Under way.....	20,000
Dumas.....	Methodist.....				25,000
Earle.....	Methodist.....			Begin in fall.....	40,000
El Dorado.....	First Baptist.....	Dougherty & Gardiner.....	Stewart-McGehee Const. Co.....	50% complete.....	175,000
Imboden.....	First Methodist.....	J. F. Glover.....	Under architect.....	Good progress.....	16,000
Little Rock.....	"Wesley Hall".....	John P. Almand.....	Ault & Burden.....	Build soon.....	125,000
Eudora.....	Presbyterian.....			Contemplated.....	15,000
	Baptist.....			Contemplated.....	15,000
Jonesboro.....	First Methodist.....	John P. Almand.....		Begin shortly.....	200,000
Mena.....	St. Agnes.....	Lambert de Koning.....		Well advanced.....	25,000
Paragould.....	First Baptist.....	Mitchell Selligman.....		Planned.....	60,000
Pine Bluff.....	Christian.....	Mitchell Selligman.....		Planned.....	60,000
Texasarkana.....	St. Joseph Catholic.....	Edw. T. P. Graham.....		Foundation complete.....	100,000
Van Buren.....	St. Edward's.....	Lambert de Koning.....	Percentage basis.....	Under way.....	40,000
	Baptist.....	W. H. Mitchell.....	John T. Blevins.....	Completed.....	11,000
	E. V. B. M. E. South.....		Day labor.....	Almost complete.....	11,000
	First M. E. South.....	W. H. Mitchell.....	Elzy McBride.....	Contemplated.....	16,000
Wynne.....	First Methodist.....			Contemplated.....	25,000
District of Columbia					
Washington.....	St. Paul's.....	O. H. Smith.....	W. E. Mooney.....	Well advanced.....	50,000
	New McKinley.....	F. H. Brooke.....	A. J. Smith.....	Under way.....	50,000
	Memorial tower.....				
	Cleveland Pk. Cong.....	Clarence L. Harding.....		Begin shortly.....	40,000

City and State	Church	Architect	Contractor	Status of Work	Cost
	Jones Memorial M. E.	Woodson & Vaughn			10,000
	St. Matthews		Wm. P. Lipscomb		24,000
	All Souls	Coolidge & Shattuck	Boyle-Robertson Cons. Co.	Under way	400,000
	Christian Science	F. R. White			15,000
Brightwood	Emory Methodist	Milburn, Helster & Co.	Frank Genéchesi	Ready by fall	60,800
Florida					
Auburn	Episcopal	Frank Lockwood		Start soon	36,000
Bradentown	Methodist	J. A. Baylor	McDevitt-Fleming Co.	Roof on	100,000
Crescent City	M. E. South	T. L. Brodie			12,000
Daytona	First Baptist	S. H. Gore	Shelton S. Richardson	Nearly complete	30,000
	First Baptist	Bradshaw & Crews	Under architects	Complete	19,000
Lakeland	Dixieland M. E. South			Start in June	50,000
Groveland	M. E. South	C. Z. Osborne	Under architects		14,000
Miami	Holy Name	O. J. Williams			530,000
	Stanton Memorial Bap.				15,000
Haines City	Methodist				
Lake Wales	Baptist	H. L. Cain			25,000
Plant City	First Baptist	H. L. Cain	L. C. Fallin	Under way	50,000
Pensacola	Temple Bethel				50,000
Quincy	Presbyterian	Mark & Sheftail		Plans under way	35,000
Tampa	Beulah	W. A. Rayfield & Co.	M. Halrine		65,000
	Seventh Day Adventist	J. W. Biggar	J. J. Hendry		90,000
	First Baptist	W. A. Shull	J. W. Maine		90,000
	Hyde Park Meth.			Contemplated	80,000
St. Petersburg	First Methodist			Contemplated	80,000
Georgia					
Atlanta	N. O. Jackson, Pastor	A. Ten Eyck Brown		Start in June	60,000
	Grace M. E. South	R. S. Pringle & F. P. Smith	Griffin Const. Co.	Just started	50,000
	Capitol View Bapt.	Chas. E. Choate		Contemplated	30,000
	St. Anthony's	A. Ten Eyck Brown		Start in May	55,000
	Druid Hill Baptist			Contemplated	120,000
	St. Lukes Meth.	G. L. Corley	E. D. Ing.	Work begun	75,000
	Grant Park Bapt.	Chas. E. Choate	Chas. L. Cathcart		60,000
Athens	First Baptist	Baskerville & Lambert			20,000
Augusta	Second Baptist	Story & Clark	Holley Const. Co.	Completed	17,000
Blue Ridge	M. E. South	Daniell & Beutell		Not started yet	10,000
Columbus	First Baptist	T. Firth Lockwood		Begin soon	100,000
Jonesboro	Baptist	Daniell & Beutell	Day labor	Well under way	30,000
Rome	First Church of Christ	O. W. McCurry	Under architect	Under way	50,000
Rossville	M. E.	Plan by owner	McDevitt-Fleming Co.	Just completed	60,000
Macon	Cherokee Hts. Meth.				60,000
West Point	First Presby.		West Point Iron Wks.		15,000
Kentucky					
Bardwell	M. E. South	W. E. Gore	Jack Cole	Completed	25,000
Covington	Latonla Christian	David Davis	Northcutt Bros.		60,000
Fort Thomas	First Baptist	C. C. & E. A. Webber	J. K. Mays & Son	About complete	25,000
Frankfort	St. John's Meth.	E. L. Oberwarth	T. L. Brooks		14,000
Georgetown	Presbyterian	Martin Geretz	David Wolfe	Well under way	18,000
Louisville	Woodland Ave. Presby.	Brinton B. Davis		Begin soon	50,000
	Campbell St.	Joseph & Joseph		Under way soon	50,000
	St. Dennis R. C.	Fred Erhart		Begin soon	50,000
Corbin	First Baptist	F. L. Smith	Coombs Lumber Co.	Just started	30,000
Somerset	Meth. Epis.	Asso. Engr. Co.	Under architect		160,000
Louisiana					
Houma	M. E.	Favrot & Livaudais	W. J. Quick	Just completed	17,000
New Orleans	Napoleon M. E.	H. F. Hinrichs	Architects supervising	Under way	80,000
	St. Marks		J. A. Petty		175,000
	R. C. Society of Arma.		L. F. Favrot		40,520
	R. C. Diocese		Jos. Fromherz		576,600
	Mt. Zion				30,000
	St. James				50,000
Thibodaux	St. Joseph's Catholic	Burton & Bendernagel	Jas. A. Robichaux	Well under way	285,000
West Monroe	Baptist	Herbert L. Cain		Start soon	55,000
Homer	Methodist			Bids in May	50,000
Shreveport	First Baptist			Complete	500,000
Maryland					
Baltimore	Grace & St. Peter's	W. H. Ritter	B. F. Bennett Bldg. Co.		\$92,000
	Fred. Ave. M. E.	H. L. Cain	Consol. Engrg. Co.	Under way	40,000
	Har Zion	Louis Levi	M. A. Long Co.		65,000
	Broadway M. P.	Owens & Cisco	M. A. Long Co.	Under way	50,000
	St. Bridget's R. C.		Harold A. Sloan		0.000
	Waverly M. E.	Roy G. Pratt	Mason & Fox	Under way	140,000
	Huntington Bapt.	H. L. Cain			40,000
	All Saints Ev. Luth.	F. E. Beall	Hicks, Tase & Norris, Inc.	Just started	100,000
	St. Phillips P. E.	Clyde N. Friz		Contemplated	
	Fulton Baptist	Walter Corbin			40,000
	Messiah P. E.	Mottu & White	Consolidated Engr. Co.	Under way	200,000
	North Ave. M. E.	Roy G. Pratt		Projected	65,000
	Hampden M. P.			Contemplated	100,000
	Third United Breth.			Contemplated	20,000
	Oheb Shalom	Benj. Frank	West Const. Co.	Advanced	200,000
Curtis Bay	M. E.	Roy G. Pratt	Under Owner	Under way	40,000
Govans	Gregory Bapt.		Graham Cranston		15,000
Churchville		Rev. R. E. Beachley			15,000
Frederick	Asbury M. E.	B. E. Kemper	Hahn & Betson	Under way	22,000
	First Baptist	H. L. Cain			30,000
Salisbury	Bethesda M. P.	Geo. E. Savage	Hastings & Parsons Co., Inc.	Under way	125,000
Mississippi					
Biloxi	First Baptist			Begin in fall	40,000
Crystal Springs	Episcopal	Harry Osgood			13,000
Leland	Baptist	Raymond B. Spencer	D. B. Thomas & Sons		50,000
Greenwood	Baptist	C. W. Bulger			30,000
Jackson	Capitol St. Meth.				90,000
New Albany	Baptist	J. E. Greene		Start shortly	60,000
McComb	Catholic	Kramer & Lindsey	Archts., in charge	Under way	48,000
Newton	Methodist				10,000
Oxford	Methodist Episcopal			Contemplated	60,000
Canton	M. E. South	R. B. Spencer		Projected	60,000
Missouri					
Adrian	M. E.	Chas. A. Smith	W. C. Stover	Well advanced	21,500
Bollivar	Christian	A. C. Michaels	Day labor	Under way	35,000
	M. E.	Elston Axon & Russel	Bramer & Sons		30,000
	Missionary Bapt.	R. V. Hunt			40,000
Butler	Christian				50,000
Canton	Christian	J. Hal Lynch & Son	W. R. Odor		30,000
Clayton	M. E.	Kennery & Stiefmeyer	Let by archts.	Complete	25,000
Columbia	Evang. Luth.	A. Meyer		Start soon	20,000
Cape Girardeau	First Bapt.	C. J. Bulger		Start in July	75,000
Clinton	First Bapt.			Start soon	45,000
Columbia	Second Christian	W. A. Miller			35,000

City and State	Church	Architect	Contractor	Status of Work	Cost
Frankenstein	Our Lady R. C.	Ludwig & Dreisonner		Start soon	95,000
Higginsville	Lutheran	A. Meyer		Start soon	15,000
Joplin	Ch. of Nazarine	Plans by church	Day labor	Start soon	15,000
Kansas City	Maywood Meth.	Ernest O. Brostrom	Oscar Lindahl	Under way	87,000
	Ev. Luth.	Brostrom & Drotts	L. Breitag	Well progressed	10,000
	Guardian Angel	H. W. Brinkman	Day labor	Partly complete	150,000
	Blessed Sacrament	Archer & Gloyd			100,000
	Country Club	Root & Siemens			300,000
Jefferson City	Immaculate Concep.				80,000
Springfield	Christ Epis.	Hoener, Baum & Froese	Leuthen Bros.	Progressing	50,000
Springfield	Mt. Carmel Meth.	Elston, Axun & Russell		Under way	30,000
Marionville	M. E.	W. E. Foley	A. B. Dixon	Under way	30,000
Meriville	St. Johns Ev.	A. Meyer	Sam. Grambaugh	Under way	50,000
St. Joseph	First Presby.	Echel & Aldrich	Ed. Erdbringer		80,000
Saint Louis	Kenesth Israel	S. H. Kurfoos	Lehr Const. Co.	Under way	200,000
	St. Johns Ev.	A. Meyer	Wm. R. Jewell, Jr.	Under way	90,000
	Tower Grove Pk. Ch.		August Winkel		75,000
	Salem M. E.	J. Hal Lynch & Son			100,000
	Ebenezer Luth.	Arthur Kilz			50,000
	First United Presby.	Jos. H. Senne			150,000
Kirksville	First Christian				15,000
	First Presby.			Start soon	45,000
California	Methodist				20,000
Lebanon	Baptist				15,000
North Carolina					
Asheville	First Baptist			Proposed	500,000
	Trinity Epis.	W. H. Lord	L. L. Merchant	Under way	35,000
	Chestnut St. Meth.			Contemplated	105,000
	W. Asheville Presby.	C. Gadsden Sayre	W. V. Henry		17,000
Burlington	Webb Ave. M. E. So.				20,000
	Baptist	Herbert Hunter	H. H. Thompson	Under way	70,000
Charlotte	Dilworth Meth.	C. C. Hook			100,000
	Caldwell Mem.		Thies-Smith Realty Co.		45,000
	Chapel of Hope	W. H. Peeps	John P. Little & Sons		10,000
	Tenth Ave. Presby.				
	First Baptist	J. M. McMichael		Start soon	90,000
	First Presby.	Baskerville & Lambert		Start soon	50,000
Chapel Hill	Baptist	Herbert L. Cain	Salmon, Shipp & Poe	Under way	115,000
	Methodist	Fred J. Orr			10,000
	Methodist	J. G. Rogers		Contemplated	180,000
Durham	First Presby.	Baskerville & Lambert			50,000
Concord	Methodist				15,000
East Burlington	Webb Ave. M. E. So.			Start soon	25,000
East Spencer	Methodist	C. C. Hook	A. R. Lazenby	Under way	25,000
Gastonia	First Baptist	W. C. Rogers	Brown-Harry Co.	Under way	150,000
Greensboro	Temple Emanuel	Hobart B. Upjohn		Start soon	100,000
	Holy Trinity	Hobart B. Upjohn	J. Agnus Const. Co.	Under way	35,000
	Grace M. P.			Contemplated	
Hamlet	Presby.	H. D. Harrell	Carolina Const. Co.	Start soon	34,000
	Methodist				30,000
Greenville	Primitive				10,000
Hendersonville	Methodist			Start soon	75,000
Kernersville	Meth. Epis.				30,000
Lenoir	First Presby.	Benton & Benton	Melton & Hartley	Well advanced	25,000
Liberty	M. E.	R. H. Hunt		Start soon	25,000
Marion	First Presby.	Jas. E. Greene		Start soon	35,000
Murfreesboro	Baptist	Herbert L. Cain		Start soon	35,000
Pleasant Garden	M. E. South	R. H. Hunt	W. B. Hunt		20,000
Raleigh	Central Meth.				10,000
	Pullen Mem. Bapt.	Nelson & Cooper	Jas. A. Davidson		250,000
	Tabernacle Bapt.			Proposed	100,000
Raeford	Presby.	C. Gadsden Sayre	M. W. Dew	Nearly complete	78,000
Reidsville	First Baptist	Harry Barton	King Lumber Co.	Complete	75,000
Rutherfordton	First Baptist	J. E. Greene		Begin soon	25,000
Thomasville	C. F. Finch			Proposed	80,000
Tarboro	Calvary	Hobart B. Upjohn		Start soon	50,000
Waynesville	Methodist			Proposed	50,000
West Asheville	Calvary Bapt.	T. E. Davis	Time and material	Under way	65,000
Winston-Salem	Southside Bapt.	C. G. Humphreys		Begin soon	60,000
Burkhead	Methodist	C. W. Carlton	J. E. Randleman	Started	40,000
Oklahoma					
Avant	First M. E.	C. L. Butler	Day labor	Well advanced	\$16,000
Bristow	Presby.	C. L. Butler	Day labor	Under way	75,000
Chickasha	Presby.				35,000
Henryetta	Methodist				70,000
	First M. E.	Raymond Kerr	B. A. Jackson	Progressing	84,000
Holdenville	M. E.			Contemplated	100,000
Hooker	Baptist	C. W. Bulger & Son		Well advanced	30,000
Hydro	Methodist				35,000
Kingfisher	First Christian	Layton, Smith & Forsyth		Start soon	35,000
Lawton	Centenary M. E.	Plans by owner	Holmboe Co.	Nearly complete	90,000
Montgomery	Trinity Presby.	Frank Lockwood	Crampton Lumber Co.	Under way	35,000
Muskogee	First Bapt.	R. H. Hunt & Co.		Start soon	150,000
	Sacred Heart	J. Harding	J. J. Rooney	Complete	35,000
	Immanuel Bapt.			Contemplated	
Norman	M. E.	Monnott & Reed			200,000
Oklahoma City	First Presby.	Hawk & Parr	Chas. M. Dunning	Nearly complete	100,000
	First Christian	Hawk & Parr		Start soon	40,000
Okeene	St. Anthony's	Monnott & Reed	Reinhart & Donovan Co.	Well under way	50,500
Okemah	First Methodist				50,000
Ponca City	Free Methodist				25,000
Tulsa	Trinity Epis.	Geo. C. Winkler			300,000
South Carolina					
Beaufort	Methodist	G. Lloyd Preacher & Co.		Contemplated	
Charleston	Central M. E.				10,000
	First Presby.			Contemplated	
Chester	First Bapt.	A. D. Gilchrist	W. T. Beamguard	Under way	29,000
Columbia	Main St. Meth.	Lafaye & Lafaye	Summersett & Cray	Nearly complete	40,000
	Bethel A. M. E.	J. A. Lankford	Cuaghaman Contr. Co.	Complete	80,000
Conway	Meth. South				20,000
Florence	St. John's Epis.	L. McD. Hicks	Dargan-Harliee Realty Co.	Nearly complete	30,000
Greer	Presby.		J. C. Cunningham		28,000
Fountain Inn	Methodist				60,000
Greenwood	Baptist				40,000
McBee	Methodist				12,000
New Prospect	Baptist	L. D. Proffitt		Start soon	20,000
Owings	Mt. Carmel Meth.		Day labor	Nearly complete	
Rock Hill	First Presby.	A. D. Gilchrist	Southeastern Const. Co.	Under way	42,000
	St. Johns M. E.				
Spartanburg	Canaan Bapt.				
	Trinity A. M. E.	W. A. Rayfield & Co.	Tri-State Const. Co.	Under way	51,000
Statesville	Lutheran	Louis H. Asbury	F. P. Moser		35,000
Union	First Bapt.				30,000
Benton	Grace Bapt.	Jas. E. Greene		Under way	15,000

City and State	Church	Architect	Contractor	Status of Work	Cost
Tennessee					
Alamo.....	Baptist.....	R. A. Heavner.....	H. C. Jones.....	.....	15,000
Carthage.....	Baptist.....	R. H. Hunt.....	.....	Start soon.....	20,000
Centerville.....	M. E. South.....	Dr. J. A. Baylor.....	L. B. Connelly.....	.....	31,000
Clarksville.....	Christian.....	.....	Foster Creighton Co.....	.....	40,000
Cleveland.....	M. E. South.....	Dr. J. A. Baylor.....	R. L. White.....	.....	35,000
Cookeville.....	Baptist.....	Dougherty & Gardner.....	J. E. Allen.....	.....	20,000
Bristol.....	Green Spring Presby.....	Burnett, Dixon & Burnett.....	.....	.....	20,000
Chattanooga.....	Highland Pk. Bapt.....	W. H. Sears.....	C. D. Haines.....	.....	65,000
.....	Pilgrim Cong.....	J. D. Alsop.....	McDevitt Fleming Co.....	.....	33,000
.....	St. Elmo Meth.....	R. H. Hunt.....	McDevitt Fleming Co.....	Complete.....	80,000
.....	Centenary M. E.....	Dr. J. A. Baylor.....	McDevitt Fleming Co.....	Complete.....	225,000
Dresden.....	Methodist.....	.....	.....	.....	25,000
Fountain City.....	Central Baptist.....	.....	.....	.....	50,000
Greeneville.....	First Christian.....	.....	.....	Start soon.....	20,000
Jackson.....	Highland Ave.....	F. E. Tatum.....	.....	.....	.....
Harriman.....	Trenton St. Bapt.....	.....	.....	.....	50,000
Knoxville.....	Park City M. E.....	M. E. Parmace & Son.....	J. M. Dunn & Son.....	Under way.....	40,000
.....	First Baptist.....	.....	.....	Start soon.....	300,000
.....	Broadway Bapt.....	.....	.....	.....	65,000
.....	First Church of Christ.....	.....	.....	.....	10,000
.....	First Presby.....	.....	.....	.....	25,000
.....	Island Home Bapt.....	R. S. Brackney.....	.....	Start soon.....	50,000
Abion.....	M. E. South.....	.....	.....	.....	34,000
Millington.....	M. E. South.....	W. C. Lester.....	.....	.....	30,000
Maryville.....	First M. E.....	R. D. Graf & Sons.....	.....	.....	50,000
Nashville.....	East End M. E.....	H. C. Hibbs.....	Foster, Creighton Co.....	.....	25,000
.....	Holy Name Cath.....	.....	.....	.....	15,000
.....	Presby.....	.....	.....	.....	10,000
Memphis.....	McLemore Ave. Presby.....	A. F. Hansen.....	Rehmuell & Co.....	Under way.....	12,000
.....	Southside.....	.....	.....	.....	200,000
.....	Bellevue.....	.....	.....	.....	.....
.....	Trinity Lutheran.....	.....	.....	Start soon.....	.....
.....	Prescott Mem. Bapt.....	.....	.....	.....	.....
.....	Court Ave. Presby.....	.....	.....	Contemplated.....	.....
.....	Galloway Mem. Meth.....	W. C. Lester.....	.....	.....	60,000
Paris.....	First Bapt.....	H. B. Davis.....	Day labor.....	Under way.....	130,000
.....	Church of Holy Cross.....	Regan & Weller.....	W. J. Hayes.....	.....	15,000
Texas					
Austin.....	E. Ave Baptist.....	C. W. Bulger & Son.....	.....	.....	35,000
.....	M. E.....	.....	.....	Contemplated.....	200,000
.....	St. Marys Baptist.....	Giescke & Harris.....	Brydson Lumber & Const. Co.....	Complete.....	18,000
.....	Metropolitan A. M. E.....	Giescke & Harris.....	J. F. Johnson.....	Under way.....	30,000
Beaumont.....	Temple Emanuel.....	Albert S. Gottlieb.....	Herman Webber.....	Under way.....	100,000
Cameron.....	First M. E.....	Paul G. Silber & Co.....	J. E. Johnson Const. Co.....	Complete.....	82,000
Cisco.....	First Christian.....	W. W. Johnston.....	Johnston Const. Co.....	Under way.....	50,000
Dallas.....	First M. E.....	Herbert M. Greene Co.....	.....	Awards soon.....	800,000
.....	Oak Cliff Presby.....	Herbert M. Greene Co.....	Chills-Lasell Const. Co.....	Under way.....	100,000
.....	New Zion Bapt.....	.....	.....	.....	10,000
.....	Church of Christ.....	.....	.....	.....	15,000
Dalhart.....	Jenkins Mem. Bapt.....	W. R. Kauffman.....	C. D. Patterson.....	.....	85,000
Denton.....	First Meth.....	.....	.....	.....	200,000
Elgin.....	Baptist.....	W. W. Noonan.....	.....	Start soon.....	25,000
Ennis.....	Baptist.....	J. H. Leinbach.....	J. H. Dalton.....	Building.....	25,000
El Paso.....	Trinity M. E.....	.....	.....	.....	300,000
.....	First Baptist.....	.....	.....	.....	30,000
.....	Altura Presby.....	.....	.....	.....	50,000
Fort Worth.....	Broadway Bapt.....	Wm. C. Meador.....	C. L. Hudgens.....	.....	90,000
.....	Weatherford St. Meth.....	Wm. C. Meador.....	G. T. Hubbard.....	.....	75,000
Houston.....	Woodland Bapt.....	R. H. Hunt.....	Jos. M. L. West.....	Well advanced.....	40,000
.....	North Side Meth.....	Alfred C. Finn.....	.....	.....	102,000
.....	First Bapt.....	C. D. Hill & Co.....	Tom Tellepsen.....	Under way.....	200,000
.....	Beth Abraham.....	.....	.....	.....	10,000
Hubbard.....	First Bapt.....	C. H. Leinbach.....	R. Wilson.....	.....	35,000
Kingsville.....	Meth.....	.....	.....	.....	50,000
Marlin.....	First Bapt.....	R. H. Hunt.....	.....	.....	75,000
Mexia.....	First Bapt.....	C. W. Bulger & Sons.....	W. G. Barnes.....	.....	75,000
Grange.....	First Meth.....	A. Baben.....	T. A. Howell.....	Practically complete.....	100,000
Port Arthur.....	Trinity M. E. So.....	Paul G. Silber & Co.....	.....	Start in July.....	95,000
San Antonio.....	St. Anne's R. C.....	John M. Marriott.....	Whelan & Laigh.....	Nearing completion.....	37,400
.....	Sisters of Divine Prov.....	Leo M. J. Dellmann.....	Aug. A. Fuessel.....	Under way.....	300,000
.....	Travis Park Meth.....	.....	.....	Complete.....	14,000
.....	Beacon Hill Bapt.....	Wm. N. Noonan.....	John Hagy.....	Complete.....	100,000
San Marcos.....	First Bapt.....	.....	Moore Const. Co.....	.....	35,000
Snyder.....	First Bapt.....	C. H. Leinbach.....	Day labor.....	.....	75,000
Taylor.....	First Bapt.....	W. A. Arbuckle.....	.....	.....	60,000
Waco.....	Central Presby.....	Paul G. Silber & Co.....	J. E. Johnson Const. Co.....	.....	65,000
.....	St. Johns Meth.....	Cason Bros.....	J. F. Cason.....	Nearly ready.....	100,000
.....	Austin Ave. Meth.....	.....	.....	.....	18,000
Wortham.....	New Hope Negro Baptist.....	H. L. Cain.....	J. C. Ray.....	.....	30,000
Yoakum.....	Central Presby.....	H. O. Blanding.....	R. L. Hastings.....	.....	20,000
San Antonio.....	Sally Brown Mem. Presby.....	Wm. N. Noonan.....	R. L. Hastings.....	.....	40,000
.....	St. John's Hall.....	.....	A. Vogel.....	.....	.....
Virginia					
Amelia.....	Baptist.....	H. L. Cain.....	W. A. Loyd.....	.....	13,000
Abingdon.....	Green Spring Presby.....	.....	.....	.....	18,000
Charlottesville.....	First Bapt.....	H. L. Cain.....	.....	.....	75,000
Danville.....	Mt. Vernon M. E.....	Mitchell & Hunter.....	.....	Start soon.....	25,000
Farmville.....	Presby.....	.....	.....	Start soon.....	20,000
Ferrum.....	M. E. So.....	.....	.....	Start in fall.....	25,000
Fredericksburg.....	Baptist.....	.....	.....	Contemplated.....	30,000
Graham.....	Soldiers and Sailors Mem. Bapt.....	H. L. Cain.....	.....	.....	.....
.....	Methodist.....	.....	.....	Contemplated.....	50,000
Jarratt.....	High Hill Bapt.....	H. L. Cain.....	C. M. Brown.....	Under way.....	18,000
Lynchburg.....	Euclid Ave. Christian College Hill Bapt.....	.....	Hamilton Bros.....	.....	20,000
Martinsville.....	M. E.....	.....	Eubank & Caldwell, Inc.....	Contemplated Just begun.....	57,080
Marshall.....	Baptist.....	.....	Herbert L. Cain.....	.....	20,000
Norfolk.....	First Presby.....	.....	.....	Contemplated.....	.....
.....	Park Place Bapt.....	.....	.....	Contemplated.....	.....
Petersburg.....	Calvary Bapt.....	H. L. Cain.....	J. P. Wright.....	Nearly complete.....	40,000
Roanoke.....	Calvary Bapt.....	H. M. Miller & H. L. Cain.....	.....	.....	175,000
.....	Lutheran.....	O. M. Topp.....	J. L. Crouse.....	.....	47,000
.....	Paleigh Court M. E.....	G. R. Ragan.....	.....	Start soon.....	65,000
.....	Trinity M. E. So.....	E. G. Frye.....	J. F. Barbour & Sons.....	Under way.....	45,000
Salem.....	College Ave. Luth.....	Chas. Kountz.....	.....	.....	70,000

City and State	Church	Architect	Contractor	Status of Work	Cost
Winchester.....	Church of United Breth.	J. B. Ferguson & Co.	Glaize Bros.	Start soon	60,000
Suffolk.....	Oxford M. E.	Beryl Riddick, Jr.		Start in fall	35,000
Richmond.....	Meade Mem. Epis.				17,500
	Richmond Hts. Bapt.				
	Battery Park Christian		R. M. Anderson		26,000
	Monument M. E.	Carneal & Johnston	B. W. Shawalter		70,000
	Barton Hts. M. E.	Chas. M. Robinson	Davis Bros., Inc.		77,000
	St. Marks Epis.	Baskerville & Lambert	Claborn & Taylor, Inc.	Part complete	140,000
	Ginter Park M. E.	Chas. M. Robinson	O. C. Peers	Complete S. S.	
	Bethlehem Bapt.	C. T. Russell		Just begun	25,000
	Grace Covenant Presby.	Peebles & Ferguson			
	Battery Pk. Christian				150,000
	St. Thomas	Lee & Lee			15,000
Staunton.....	Allen A. M. E.	J. A. Lankford			30,000
West Virginia					
Beckley.....	First Presby.	Richard W. Bates, Jr.			
Bluefield.....	Sacred Heart	Martin F. Garey			75,000
		Robt. A. Sheffey			
	Bland St. Meth.	A. B. Mahood	C. W. Hancock & Sons	Start soon	75,000
	Adam St. M. E.	Frank Stone			30,000
Charleston.....	Humphreys				60,000
	M. E. So.	Heggenbotham & Knapp	Vess & Wilson	Under way	330,000
	Central M. E.				14,000
	Church of God	C. I. Johnson	G. C. Gaines		15,000
	Calvary Bapt.				40,000
Chelyan.....	M. E. So.	Herbert S. Kyle	Day labor	Under way	45,000
Clendenin.....	M. E. So.	Dr. J. A. Baylor	McDevitt-Fleming Co.	Soon complete	50,000
Clarksburg.....	Christ Epis.	Cram & Ferguson		Contemplated	
Franklin.....	Presby.	S. S. Johnson	Jno. F. Wagner	Complete	50,000
Huntington.....	Johnson Mem.				
	Highlawn Presby.	S. L. Day	C. H. Smith		40,000
	Sixteenth St. Bapt.				40,000
Keyser.....	Grace M. E. So.	Hersh & Shollar			50,000
Martinsburg.....	Grace Chapel				33,000
Ronceverte.....	M. E. So.	G. R. Ragan	R. L. Wright		40,000
Wheeling.....	St. Joseph's				150,000

Galveston Causeway Dedicated and in Use.

Galveston, Texas, May 13—[Special.]—Galveston's causeway was recently dedicated to the uses of commerce and thus Galveston island was linked with the mainland. This remarkable reinforced steel and concrete causeway is 10-

steam railroads, the electric interurban and Galveston county participating in the expense on a pro rata basis. Throughout its length is a concrete base, brick and surfaced highway for vehicular traffic. There are 107 arches in the causeway, supported upon piles driven to a depth of 40 feet.



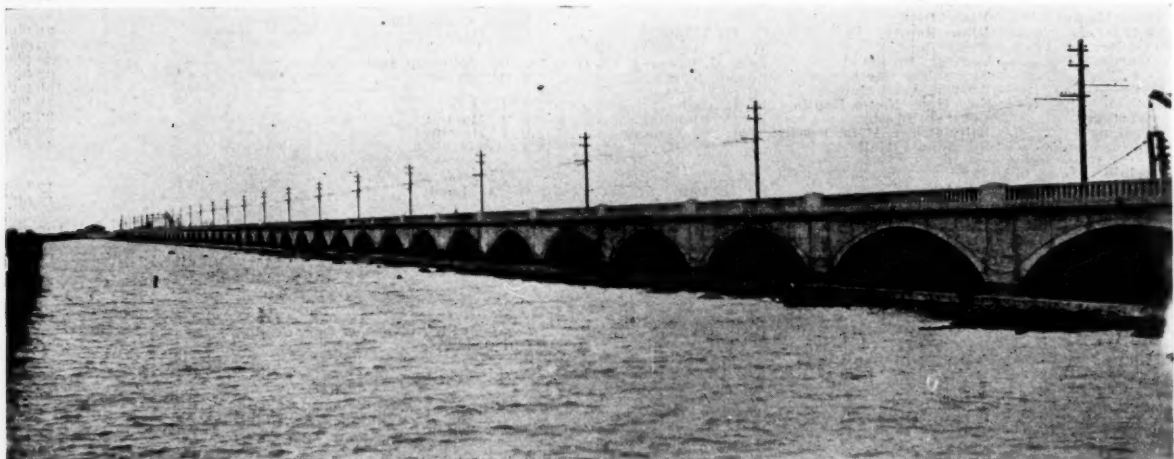
AUTOMOBILE DRIVING OVER GALVESTON CAUSEWAY.

685 feet long, 63 feet wide, and has three railroad tracks upon it leading into this big cotton and wheat exporting port.

The causeway cost in the aggregate \$3,700,000, with the

Huge Shipment of High Grade Phosphate from Tampa.

The largest shipment of phosphate since before the war was made recently from the port of Tampa by the Coronet Phosphate Co. It consisted of 9000 tons of the highest grade of pebble phosphate and was destined for Denmark by British steamship. Such a shipment would fill about 210 freight cars and its estimated value in Tampa is about \$88,000. The fact that this great tonnage could be loaded aboard ship from the Seaboard terminals in a period of approximately 36 hours is an evidence of the great advantage of such extensive port facilities and is regarded in Tampa as a concrete illustration of the value of the suggestion made some 16 years ago by Mr. C. G. Memminger, president of the Coronet Phosphate Co. to the officials of the Seaboard to the effect that a phosphate elevator and dock on Seddon Island, a Seaboard property at the mouth of the Hillsborough River, would prove to be a profitable investment.



VIEW OF NEW GALVESTON CAUSEWAY SHOWING ARCHED CONSTRUCTION OF REINFORCED CONCRETE.

Increasing Activity in Southern Building—A 30 Per Cent Advance in Valuation in First Four Months of This Year Over Last.

April construction in sixteen Southern states as indicated by reports from building inspectors in representative cities and towns was slightly more than 7 per cent greater than during the preceding month.

Compared with the activity in the same month last year there was an increase in valuation of \$924,071 in April, 1922. Excluding Baltimore the records for April, 1922 and 1921 are \$28,564,000 and \$20,636,529, respectively, for 59 cities and towns, thus registering an increase of nearly 40 per cent in Southern building during April as compared with the same month last year. The big decrease in valuation in Baltimore is due to the issuance in the fourth month of 1921 of the permit for the American Sugar Refining Company's plant, for \$6,000,000, the building inspector's total for April, 1922 being \$2,962,440 compared with \$9,965,840 in the same month last year.

Last month the valuation of permits issued in 60 cities and towns in the South was \$32,579,294, compared with \$30,180,292 for the same cities in March. During the first four months of this year the valuation amounted to \$108,028,253 compared with the total of \$83,363,382 for the same period of 1921. Thus building activity of all kinds for the first four months of 1922 exceeded the same period last year in valuation by approximately 30 per cent.

BUILDING PERMITS ISSUED.

City and State.	March, 1922.		April, 1922.		April, 1921.	
	No.	Est. Cost.	No.	Est. Cost.	No.	Est. Cost.
Alabama:						
Birmingham ..	444	\$648,784	467	\$403,720	514	\$479,842
Montgomery ..	70	81,109	...	...	113	52,360
Arkansas:						
Little Rock ..	243	332,572	212	219,533	214	251,949
Fort Smith ..	86	188,276	68	377,517	57	82,491
Pine Bluff ..	25	40,850	32	89,547	39	96,510
District of Columbia:						
Washington ..	964	3,279,544	1038	3,640,168	868	2,293,942
Florida:						
Jacksonville ..	369	394,816	300	308,067	283	285,472
Miami ..	195	366,700	...	...	288	424,300
Orlando ..	82	259,210	53	75,114	101	106,604
Pensacola ..	66	26,292	67	34,171	75	55,282
Tampa ..	259	279,877	228	265,879	81	331,095
W. Palm Beach ..	...	...	84	158,590	63	93,375
Palm Beach ..	...	131,400	5	50,000	...	208,300
St. Petersburg ..	152	274,930	165	406,300	174	357,950
Georgia:						
Atlanta ..	471	2,110,818	503	1,297,451	...	778,328
Augusta ..	...	...	137	167,320	187	67,218
Columbus ..	...	...	29	46,185	23	131,150
Macon ..	175	88,889	171	129,077	47	55,290
Savannah ..	70	138,510	61	163,970	65	117,760
Kentucky:						
Louisville ..	376	1,303,900	528	2,175,576	424	554,200
Lexington ..	98	128,065	146	260,596	103	193,870
Covington ..	62	105,525	87	152,450	73	112,600
Louisiana:						
New Orleans ..	246	644,205	250	732,350	277	652,625
Shreveport ..	248	477,543	261	721,907	291	345,595
Lake Charles ..	24	16,140	28	13,035	19	19,210
Maryland:						
Baltimore ..	1817	4,668,720	1912	2,962,440	2072	9,965,840
Cumberland ..	47	55,437	65	108,532	59	91,660
Frederick ..	6	6,068	13	64,620	...	...
Mississippi:						
Meridian ..	15	59,450	...	...	4	14,600
Jackson ..	100	85,000	...	...	17	27,715
Missouri:						
Kansas City ..	425	1,263,050	527	1,488,690	375	757,750
Springfield ..	71	117,585	84	81,370	75	111,957
St. Joseph ..	88	81,800	126	190,784	...	94,480
St. Louis ..	1128	1,799,005	1260	2,114,921	1077	1,127,153
North Carolina:						
Asheville ..	101	323,295	112	316,797	101	147,066
Durham ..	24	61,625	35	140,750	23	30,275
Hix Point ..	38	51,765	38	475,960	29	69,670
Charlotte ..	61	197,130	64	592,850	52	154,127
Raleigh ..	...	...	68	69,525	...	...
Wilmington ..	16	98,500	...	...	16	36,700
Winston-Salem ..	139	311,210	135	262,930	163	177,150
Greensboro ..	46	220,076	69	171,870	...	342,025
Oklahoma:						
Oklahoma City ..	214	897,982	...	492,655	216	672,472
Tulsa ..	179	647,325	148	919,010	221	612,175
Muskogee ..	39	121,000	60	1,002,000	...	...
Okmulgee ..	12	82,100	29	87,550	56	431,650
Shawnee ..	...	...	37	25,000	...	21,794
Ardmore ..	48	106,000	40	73,500	71	190,106

South Carolina:						
Charleston ..	55	49,535	45	238,480	37	88,915
Columbia ..	129	137,602	120	227,266	103	387,455
Greenville ..	54	110,000	66	92,650	56	87,455
Spartanburg ..	80	22,238	81	64,678	...	252,360
Tennessee:						
Knoxville ..	247	445,212	188	482,726	173	347,397
Chattanooga ..	236	108,119	210	140,225	249	169,039
Memphis ..	425	1,345,440	...	...	248	426,312
Nashville ..	371	432,204	450	504,274	233	130,903
Texas:						
Houston ..	619	1,328,925	698	1,680,967	588	1,180,445
Galveston ..	362	162,950	396	183,258	429	101,402
El Paso ..	97	167,095	112	436,958	183	548,685
Dallas ..	492	1,593,067	467	1,326,197	448	1,603,845
Fort Worth ..	219	1,057,501	248	557,486	190	600,919
Beaumont ..	...	142,034	22	99,950	21	71,343
Waco ..	48	100,730	41	126,314	...	70,430
Amarillo ..	25	102,875	43	315,295	...	...
San Antonio ..	416	1,650,880	379	1,021,650	290	1,150,605
Arlene ..	18	73,235	18	68,280	...	...
Virginia:						
Richmond ..	237	1,374,570	310	1,774,551	254	760,947
Norfolk ..	134	417,350	113	647,305	111	204,011
Lynchburg ..	46	87,640	56	60,685	40	38,750
Roanoke ..	172	370,606	129	344,682	135	217,700
West Virginia:						
Charleston ..	103	239,055	82	301,926	147	299,839
Huntington ..	130	388,660	153	305,530	194	460,545
Wheeling ..	87	333,253	...	...	132	259,403
Bluefield ..	...	...	53	94,582	35	112,500

The monthly increase since the first of the year in building valuation has been steadily maintained, and judging from the big amount of contracts awarded in April and preliminary reports from building inspectors in the various cities regarding activities this month May will continue the advance.

The activity is not marked by any noteworthy advances in any particular sections, but the high level established in the fall of 1921 and recent months is being well maintained throughout the South. In the summary herewith are ten cities that issued permits to the value of more than \$1,000,000 last month. They are Washington, Atlanta, Louisville, Baltimore, St. Louis, Muskogee, Houston, Dallas, San Antonio, Richmond.

\$2,000,000 Office Building at Greensboro—Contract Let for 17 Story Structure for Jefferson Standard Life Insurance Co.

Greensboro, N. C., May 20.—[Special.]—The George A. Fuller Co., of Washington and New York, has been awarded the contract for erection of the 17-story Jefferson Standard Life Insurance Co. building to be constructed at Elm and Market streets, at a cost of approximately \$2,000,000 including heating, lighting, plumbing and miscellaneous work. The structure will be of reinforced concrete. The site is now occupied by the old courthouse which will be razed immediately. In addition to housing the insurance company the Atlantic Bank and Trust Co. will have its quarters there, and 300 offices will also be provided.

There will be two main entrances to the building on the ground floor. Five passenger and one freight elevator will be installed. The five upper floors will be reserved by the insurance company, with provisions on two other floors for future expansion. A cafeteria and a rest room will be located on the top floor.

Charles C. Hartman, of this city, is the architect.

Virginia Bridge and Iron Begins Operation of Birmingham Steel Plant.

Birmingham, Ala., May 20.—[Special.]—The Virginia Bridge & Iron Co., of Roanoke, Va., has begun operation of the recently acquired property of the Birmingham Steel Corp. It will be conducted along the same lines as the plants of the company at Roanoke and Memphis. Fabricated structural steel for bridges and buildings will be manufactured. The property embraces some 90 acres of land, a main shop 300 by 400 feet, office building and store and auxiliary buildings. New machinery and equipment is being installed and changes made to secure proper efficiency in manufacturing.

"Old Hickory" War Plant Now Being Rapidly Developed by Various New Industries.

Nashville, Tenn., May 19—[Special.]—The Old Hickory powder plant of the Government, located a few miles outside of Nashville and consisting of 5700 acres of land is fast being developed. The Nashville Industrial Corporation, which took the property over, has turned back 1000 acres for farm purposes and now has 300 acres under sale or lease for industrial operations. One company recently organized for work on the property is the Hermitage Portland Cement Co., capitalized at \$1,500,000. John C. Vance, Chattanooga, is president; T. L. Herbert, Jr., Nashville, is vice-president; and these men with S. S. Price, Chattanooga, M. C. Monday, Knoxville and R. A. Ellis, Chicago, form the board of directors. R. T. Miller is secretary and treasurer of the company and will be the general manager.

The company took over the existing boiler plant, coal handling, crushing and conveyor systems and will utilize them in the operation of the cement plant. All told they will use 24 acres of land, with buildings and contemplate an operation of 2000 barrels per day. The completed project will represent an expenditure of approximately \$1,000,000.

Upton Bros., Bristol, Ind., is another company that will occupy part of the tract. They manufacture a line of electrically driven farm pumps and have leased the foundry with option of purchase. In addition they will do general custom foundry work.

The Nashville Pulp and Paper Mills is getting ready to operate. They found they could get a supply of short leaf pine at from 50 to 150 miles of the plant that would give a 50-year supply. They are installing a pulping unit and a drying unit, a wood room, a causticizing plant and a recovery plant and are planning for an output of 75 tons per day of sulphate pulp for kraft paper, container board and corrugated paper stock. It is believed that the processes to be employed in this plant are such that make it the last word in construction and output.

The Southland Motor and Body Corporation, capitalized at \$250,000 is another operator.

The Food Products Corporation of Tennessee, with H. H. Moss as president and general manager, has been organized to manufacture syrup, starch and by-products from sweet potatoes. Their claim is that the farmer can thus dispose of 100 per cent of his crop inasmuch as the company can utilize off-graded and off-sized potatoes in their work. Their experiments have been conducted with the Federal and State departments and with the University in Nashville and the results point to a successful operation and a prime product.

It is the intention of all the companies to market the various products under the trade name of "Old Hickory." For example, Old Hickory paper; Old Hickory auto bodies, also the Old Hickory Novelty and Manufacturing Co., another concern whose general line of business is indicated by its name.

Tampa Shipping Facilities Greatly Increased by Completion of Big Phosphate Elevator of Atlantic Coast Line.

Tampa, Fla., May 22—[Special.]—One of the biggest single improvements in shipping facilities at this port will be brought about by the completion this month of the large phosphate elevator of the Atlantic Coast Line Railroad. It is a massive steel structure, 430 feet long and 90 feet high, resting on concrete foundations. It will have a loading capacity of 400 tons per hour, the facilities of the company being thereby increased from 60 to 80 per cent.

There are 12 loading spouts and three movable chutes, thus making it unnecessary to change the position of the ship. Special phosphate cars from the mines in Polk and Hills-

borough counties are hauled three at a time up an incline track over a dumping pit and unloaded. The rock is carried from the pit to a chain of buckets by an apron conveyor. There are 280 buckets on the endless chain, approximately 1000 feet long, and each of these holds 800 pounds of phosphate. It is 70 feet from the dock to the level of the conveyor chain where the buckets dump into the spouts; this facilitates loading by making it possible to place the chutes at an angle of about 45 degrees over the hatch of a vessel.

A patented sampling device has been installed, which will do away with hand sampling. The apron conveyor is operated by a 50 horse power unit, 150 horse power is required to operate the car puller and a like size unit is necessary to operate the conveyor chain and buckets. Two 150 horsepower boilers have been installed with provision for a third if required.

Technical Photographic Society Formed.

The Technical Photographic and Microscopical Society has been organized in New York with the following officials: President, James McDowell of Sharp & Hamilton Mfg. Co., Boston; vice-presidents, John H. Graff of the Brown Co., Berlin, N. H., and Bennett Grotta of the Atlas Powder Co., Tamaqua, Pa.; secretary-treasurer, Thomas J. Keenan, editor of Paper, New York.

It is planned to hold a general convention of industrial and microscopical photographers in connection with an exhibition of photographic work, chemicals and apparatus at the Grand Central Palace, New York, during the National Exposition of Chemical Industries, September 11-16, 1922.

Contract Let for \$500,000 Memorial Auditorium.

Chattanooga, Tenn., May 20.—[Special.]—Farks & Co., of this city have been awarded the general contract for construction of the Memorial Auditorium here. The Fred Cantrell Co. received contract for the plumbing and heating. The entire structure when completed will represent an expenditure of approximately \$500,000. The building will be erected at a considerable saving over previous estimates, the original price being \$750,000. By holding the bonds available for the purpose until just recently they were sold at a much higher figure than was offered some months ago.

\$750,000 Federal Reserve Bank Building to Be Erected at New Orleans.

New Orleans, La., May 13—[Special.]—George J. Glover, 1033 Whitney Central Bldg., has been awarded the general contract for erection of the new building for the New Orleans branch of the Reserve Bank of Atlanta, involving the expenditure of approximately \$750,000. The structure will be six stories high with basement. Rathbone De Buys, 1406 Hibernia Bank Bldg., is the architect.

\$2,000,000 Water Works Contract Awarded.

Wheeling, W. Va., May 20.—[Special.]—Contract for the engineering work in connection with this city's \$2,000,000 water works project has been awarded The J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa. They are now engaged on surveys and on design plans for various portions of the work, and it is hoped to have plans in readiness for asking bids on parts of the project within the next 90 days.

Green & Stowe, Welch, Va. have been awarded the contract for erection of a building for the Carter Hotel Co., at Welch, involving the expenditure of more than \$150,000. It will be 72 by 85 feet and five stories with basement, of steel frame, brick walls and Bedford stone trim. Garry & Sheffey, Bluefield, W. Va., are the architects.

300,000 Tons of Birmingham Coke Offered to Northern Markets.

Birmingham, Ala., May 15—[Special.]—The Sloss-Sheffield Steel & Iron Company is offering 300,000 tons of by-product coke on the market, coke produced at the big by-product coke ovens at North Birmingham during the past year when industrial conditions were slow and the plant had to operate because of the contract held to supply Birmingham with gas through the local utilities company. Three hundred thousand tons of coke is piled up in immense stacks around the plant. Negotiations are said to be under way for the shipment of the product into the Pennsylvania field. Freight rates have held down a quick disposition of the product but a water course is being sought. Traffic Manager Rouzer of the Sloss-Sheffield Steel & Iron Company has been in the coke consuming territories, especially where the coal miners strike is being felt and has offered coke from this district.

Some little coke is being shipped from Birmingham to South America and movements of the product into Mexico will most likely be materially increased in the near future, readjustment of freight rates being looked for in that direction.

Coal production in Alabama is off a little, expectations of big business not having been realized. Coal operators here have not increased coal prices any. A limited tonnage of coal has been sold for delivery into territories affected by the strike in the north.

Steel Mills in Wheeling District Approach Normal.

Wheeling, W. Va., May 20—[Special.]—Steel mills in the Wheeling district are rapidly reaching normal operation, there having been during May a resumption of operations at a number of plants in the district as a whole and particularly at the mills of the Wheeling Steel corporation. Within the last few weeks many of the units of the Wheeling corporation have resumed production, some of the mills being on a basis nearer normal than at any time in the last eighteen months. So far the coal strike has not retarded improvement in the steel industry locally. Additional mills have been put in operation at the Yorkville plant of the Wheeling Steel & Iron Company, a subsidiary of the Wheeling Steel corporation. These are tin mills No. 10 and No. 12. There are now 16 mills at the Yorkville plant on full turn, bringing the capacity of the plant up to two-thirds of normal and bringing the working force up to 1000 men. The plant is working on a basis of three eight-hour shifts. Operations have also been speeded up at the Beech Bottom plant of the Whitaker-Glessner company and at the Creek mill plant of the same company at Wheeling.

Operations of the various companies are now about on the following basis:

Wheeling Steel and Iron Company: Benwood plant operating 40 per cent; Belmont plant operating 65 per cent; Top Mill Blast furnaces operating 100 per cent; Martins Ferry Furnace, idle; Yorkville plant, 66 per cent.

Whitaker-Glessner company—Martins Ferry mills, idle; Beech Bottom plant, 50 per cent; Wheeling can department, 50 per cent; Creek Mill, 50 per cent; Portsmouth plant, 80 per cent.

La Belle Iron Works—Steubenville plant, operating 75 per cent; Wheeling plant operating 85 per cent.

Bethlehem-Lackawanna Deal Confirmed.

The directors of the Bethlehem Steel Corporation and the Lackawanna Steel Company at special meetings held last week to consider the deal for the absorption of the latter by the former, immediately confirmed the plan subject to approval by the stockholders, of which there is no doubt.

The Lackawanna will be paid for in stock of the Bethlehem Steel Corporation.

It is announced that the Bethlehem Corporation proposes to spend \$10,000,000 at once, mainly for improving and developing the Lackawanna property. Other improvements and extensions of the consolidated properties will call for the future expenditure of from \$15,000,000 to \$25,000,000. Moses Taylor, chairman of the Lackawanna Steel Co. and other important interests associated with him in Lackawanna will be closely associated with the direction of the consolidated plants.

In this connection it is important to note the withdrawal of the Youngstown Sheet & Tube Co. from the proposed merger of several independent companies, Lackawanna being first to withdraw. J. A. Campbell, president of the Youngstown Company, declined to give a reason for withdrawing referring to the reason as "a delicate matter." He denied that his company was negotiating with any other company, this referring to rumors that Bethlehem was after it.

Thos. L. Chadbourne, organizer of the projected seven-company merger, was quoted as saying that conferences would continue as to whether a consolidation should be made among the remaining five companies.

Georgia & Florida Railway's Activity in Development of Southern Georgia.

Through the efforts of the Agricultural and Development Department of the Georgia & Florida Railway there is being laid the foundation for a substantial agricultural development along its line in South Georgia. Of particular interest is the diversified farming operations at Booker Station under the control of the Southern States Development Company, 2 Wall Street, New York City. This organization is developing large plantations in this fertile region divided into farm units, improved with modern buildings, and sold on interesting terms.

A complete farm unit will consist of approximately 120 acres of land improved with a new dwelling, a new barn, garage, and well, with a part of the acreage in each unit being cleared, plowed and fenced in. Several of the full units are about completed and the Company plans to avoid monotony in design by having the plans of each house different in style and arrangement. The sale of the acreage included in any one unit will be made to suit the individual purchaser.

Brooker Station is on the Georgia & Florida Railway's main line 139 miles south of Augusta, near Hazelhurst, the county seat of Jeff Davis County.

The climate of this section, with winters open and mild, and sufficient and well distributed rainfall, is said to allow a growing season for general crops of 270 days.

In general the soil in the Brooker section is gray loam top with a general pebbly mixture, with red clay sub-soil. Among the crops of the region are: Corn, cotton, sugar cane, watermelons, cantaloupes, figs, tobacco, Irish and sweet potatoes, tomatoes, cabbages, peas, beans, peanuts, oats, rye, wheat, onions, cucumbers, strawberries and other berries, peaches, pecans, and many other varieties of hay, together with practically all kinds of garden vegetables in the "winter garden" and "summer garden."

The climate is also favorable to cattle. Jerseys, Short-horns, Holsteins and Herefords are the leading breeds of cattle, and the leading breeds in swine are Hampshires, Duroc Jerseys and Poland Chinas. Poultry is also a paying industry.

Grant Parish Construction Co., Colfax, La., have been awarded the contract for gravel surfacing 27.1 miles in Grant Parish, La., cost of \$159,546 by the State Highway Commission and Grant Parish.

THE IRON AND STEEL SITUATION

Increased Output of Steel With Heavy Consumption by Automobile Makers.

Pittsburgh, May 20.—[Special].—Letting of fabricated steel contracts represents a larger tonnage than formerly, and has been at fully the fabricating shop capacity since April 1, against averages of 53 per cent in the first quarter of the year and 35 per cent in 1921.

Freight car orders continue heavy, involving about 10,000 cars in the past week. The total since January 1 is about 75,000 cars, against about 29,000 cars in the whole of 1921, and an average of about 150,000 cars a year in the ten years 1904 to 1913 inclusive. Thus the orders are running a trifle heavier this year than the pre-war average. These orders do not count so much, however, in giving employment to the steel industry, as the steel making capacity is about 150 per cent greater than in 1904 and 50 per cent greater than in 1913.

The automobile industry is consuming approximately as much steel as at any time in its history, and possibly a trifle more. Studebaker, Ford, Dodge, Maxwell and Chevrolet are all producing more cars than ever before in their history.

Apart from these three lines of consumption, the steel market is much quieter than in March and April. This quietness does not reflect any loss of strength in the market, being due simply to the fact that mills are well sold up for a couple of months and buyers are moderately well covered. The mills still have the edge as they do not need to seek any additional business while some buyers are searching for early deliveries and in some instances, the importance of which is perhaps exaggerated, are willing to pay delivery premiums.

Steel deliveries are being very well taken on all hands, despite the fact that production has increased farther. The rate of steel ingot production is now above 37,000,000 gross tons a year, against rates of 35,000,000 tons April 1, 30,000,000 tons March 1, and 20,000,000 tons in December.

The heavy production of steel probably surprises many buyers, who evidently expected production to be restricted by the coal strike. It has not been easy for the producers to increase their operations, and considerable extra expense is involved. Coal and coke are being moved long distances in some cases. The steel mills are not very hard pressed to get out tonnage, however, as is suggested by the fact that in the past three weeks only two sales of heavy melting steel scrap by dealers to Pittsburgh district consumers are reported, one of 4000 tons and one of 2000 tons. In other words the scrap market has been stagnant, while the dealers have many tens of thousands of tons they are anxious to sell—at their price, which is, say \$2 or \$3 a ton higher than the mills approve.

The steel mills are not only getting along despite the coal strike but they are fortified against the strike continuing a long time still. They have not drawn very largely upon their stocks of coal and some of the purchases they have made in non-union districts have quite a while to run.

The strikes in the Connellsville region continue, but in the past week there has been a really noticeable increase in the number of men at work. A stampede back to work is possible at any time, while there seems to be no possibility of any strikes being produced in the mines that have kept at work.

Steel prices continue to stiffen and here and there an actual advance occurs. Except on the part of a few independents who want delivery premiums, there is no disposition on the part of producers to take advantage of their newly acquired position. Bars, shapes and plates are commonly quoted at \$1.60, or \$2 a ton advance over the

market ruling in April. Nails remain at \$2.40 by the Steel Corporation and \$2.50 by the independents. In most products producers have refrained from quoting on regular third quarter deliveries, but delivery against many orders will lap over into July and perhaps in some cases into August.

Pig iron has been stagnant. Quotations, largely nominal, are: Bessemer, \$26; basic, \$25; foundry, \$24, f.o.b. valley furnaces.

Bright Prospects at Birmingham With Increasing Production and Demand at Firm Prices.

Birmingham, Ala., May 22.—[Special].—Pig iron prices, demand and production in the Birmingham district show firm and advancing tendencies, the iron and steel market in this section being quite satisfactory and prospects bright. Sales of pig iron are being made for fourth quarter delivery, though not in great tonnages on a base of \$18.50 per ton, No. 2 foundry, 1.75 to 2.25 per cent silicon while the minimum price that is to be heard of, for third quarter delivery at the latest, is \$17.50 per ton. All furnace interests have sold in good round tonnages and while there is no open willingness to sell for the balance of the year except at the highest price the opinion is expressed that there will be need for the probable make.

The production will be materially increased again next month, the tentative calendar showing three blast furnaces to resume operation, including the new, big furnace of the Tennessee Coal, Iron & Railroad Company at Ensley, which will have an output of 600 tons daily. The Sloss-Sheffield Steel & Iron Company in addition to the one furnace resuming this month will have another ready to begin next month. Three companies are out of the market entire on second quarter iron and are selling but little for the third quarter. One company is in position to sell through the balance of the year. The Woodstock Operating Corporation of Alabama has announced that the LaFollette, Tenn., furnace will be blown in as soon as it can be gotten in condition and a little later the Anniston furnace will be given attention, if the iron market continues as active as it is now.

There is belief in the minds of some of the iron men here that quotations for pig iron will continue ascending until \$20 is reached on the product to be delivered during the latter part of this year. Local consumption is still quite active.

The Tennessee Coal, Iron & Railroad Company has given labor at ore mine and coal mines a wage increase, the ore workers about 15 per cent and the coal mine workers around 10 per cent. Coal production is still under the 285,000 tons mark, though at times more than 300,000 tons was reported for the week this year. Coke demand has also picked up some and independent producers are behind a little in their delivery. Reports have been current as to big sales being made by the Sloss-Sheffield Steel & Iron Company, which concern has more than 300,000 tons of by-product coke on hand but no verification is obtained, the latest report being that the coke is to remain right in the home territory, local concerns to use it.

Material is being brought in already for the \$1,000,000 merchant mill to be erected by the Tennessee Coal, Iron & Railroad Company at Fairfield. Actual construction will be pushed.

Cement, brick, concrete and other manufacturing concerns of the Birmingham district report active demand, cement makers in particular announcing big orders recently taken on. Sewer pipe makers have contracts in hand and other business being offered that calls for steady operation, in some instances night and day.

The scrap iron and steel market shows a little more stead-

iness but far from being up to all expectations. Stocks on hand are strong and more or less of the product moving. Quotations for scrap show no change. The territory for the Birmingham dealers in old material is still compressed by reason of the high freight rates. With concessions in transportation costs, it is believed big business could be obtained by the local old material dealers.

PIG IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$17.50 to \$18.50; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$18.00 to \$19.00; iron of 2.75 to 3.25 per cent silicon, \$18.50 to \$19.50; iron of 3.25 to 3.75 per cent silicon, \$19.00 to \$20.00; iron of 3.75 to 4.25 per cent silicon, \$19.50 to \$20.50; charcoal iron f. o. b. furnaces, \$32.00 to \$35.00.

OLD MATERIAL.

Old steel axles.....	\$15.50	to	\$16.50
Old iron axles.....	15.50	to	16.50
Old steel rails.....	12.50	to	13.00
Heavy melting steel.....	10.50	to	11.50
No. 1, R. R. wrought.....	11.50	to	12.50
No. 1, cast.....	15.00	to	16.00
Stove plate.....	14.00	to	15.00
Old car wheels.....	13.00	to	14.00
Old tramcar wheels.....	13.50	to	14.50
Machine shop turnings.....	6.00	to	7.00
Cast iron borings.....	6.00	to	6.50
Cast iron borings, (Chem.).....	13.40	to	14.00

RAILROADS

Illinois Central Will Spend \$88,000,000.

The Illinois Central Railroad Co. has asked the Interstate Commerce Commission for authority to issue \$10,929,000 of preferred stock, the proceeds of which are to be employed for beginning the electrification of the company's lines in and adjacent to Chicago. The total cost of the work which the Illinois Central has decided to put under way, according to the application, will be \$88,000,000 part of which will be paid for with the proceeds of preferred stock issues and the rest with earnings of the system.

Part of Railroad In Regular Operation.

Regular service was resumed May 15 between Seligman, Mo., and Kensett, Ark., a distance of 225 miles, on the Missouri & North Arkansas Railroad, which on July 31, 1921, suspended service over its entire line from Joplin, Mo., to Helena, Ark., 368 miles. Just how soon the whole railroad will again be in use does not yet appear, but the company says that it will accept freight and passengers between Seligman and Kensett, and trains carrying the strawberry crop are in operation. It is hoped to have the entire line running in a week or two.

Mines Produce Bulk of Railroad Tonnage.

That the railroads of the United States receive from mining nearly six times as much freight as from agriculture, nearly four times as much as from manufactures, and between six and seven times as much as from the products of forests, is developed as a result of a study of the classification of railroad freight tonnage recently made by W. W. Adams, mine statistician of the Bureau of Mines. The figures show that mining products constitute about 56 per cent of the total tonnage from all sources. The tabulation was confined to railroads having an annual revenue of at least one million dollars, and only freight originating on the roads was included.

In a recent year, the freight tonnages from various sources were as follows:

	Tons.	Per Cent of Total
Products of agriculture.....	115,033,319	10.49
Animals and products.....	35,493,662	3.24
Products of mines.....	589,950,958	53.82
Products of forests.....	94,075,639	8.58
Manufactures.....	168,759,153	15.40
Miscellaneous.....	92,798,540	8.47
TOTAL	1,096,111,271	100.00

A large tonnage derived from mineral products is included in the figures classified as manufactures.

Nearly 300 New Industries Established on Atlantic Coast Line Last Year.

The pamphlet report of the Atlantic Coast Line Railroad Co. for 1921 says that during the year there were 289 new industries, including mills and various other factories located on its lines and 56 additions were made to industries already established.

Although no advertising campaign to secure farmer settlers was conducted many inquiries were received for information regarding farming opportunities. These inquiries had personal attention with the result that 779 heads of families engaged in agricultural and industrial pursuits were located along the system during the year.

The agricultural and industrial department of the company, in addition to its usual activities, has given special attention to live stock transportation and as a result of this work proper regulations have been formulated and published and a systematic educational effort is being made to bring about a better handling of live stock. On account of a recent advance in prices, especially for hogs, an increase in the number of swine raised for market may reasonably be expected. There may also be anticipated an increase in the number of milch cows and a corresponding increase in the number of creameries and ice cream factories.

Conferences held throughout the territory served by the company's lines have been attended by representatives of this department and it is noted that these gatherings and their efforts have resulted in increased diversification of crops and have been helpful in encouraging farmers to branch out into other lines of agriculture, particularly truck and fruit growing.

As to new construction it is stated that the extension of the Haines City branch from Goodno to Immokalee, Fla., about 26 miles, was completed in 1921 and the Ellenton Belt Line near Palmetto, Fla., 9¼ miles, was also finished.

The operating revenues for the year were \$66,730,767.82; operating expenses and taxes, \$61,080,832.69; net operating revenues, \$5,649,935.13; railway operating income, \$5,580,285.04; gross corporate income, \$10,903,394.84; net corporate income, \$1,790,568.62. Further particulars will be found upon another page.

New Equipment.

The Southern Railway Co. announces that it has recently placed orders for 20 locomotives, 5390 freight cars of steel construction, 500 steel automobile cars, 100 steel passenger cars and 250 caboose cars with steel underframes. If it were possible to put all these freight cars in one train it would be 47 miles long, or if they were made up in trains of average length there would be 250 trains, or one every 2¼ miles from Washington to Atlanta, a distance of 637 miles. The American Car & Foundry Co. will build 3000 freight cars, Standard Steel Car Co. 1000 and Mt. Vernon Car & Mfg. Co., 1390. The passenger cars will be built by the Pullman Company and the American Car & Foundry Co., the former building 75 and the latter 25. These purchases are covered, at least in part, by an issue of \$9,300,000 equipment trust certificates.

Florida East Coast Railway has ordered 10 caboose cars from the Mount Vernon Car & Mfg. Co.

Alabama & Vicksburg Railway has ordered a 10 wheel locomotive from the Baldwin Works.

Chesapeake & Ohio Railway is receiving bids on 500 box cars of 40 tons capacity.

United Railways & Electric Co., of Baltimore, has ordered 3 trackless trolley cars and 30 new busses, four of the latter to be double deckers.

American refrigerator Transit Co. has ordered 2000 refrigerator cars from the American Car & Foundry Co. at a cost of \$5,000,000.

GOOD ROADS AND STREETS

\$50,000,000 in Good Roads Contracts South in 1922 to Date—Activity Not Yet at Full Height.

Road contracts awarded in the sixteen Southern states since the first of the year exceed in valuation \$50,000,000 according to a compilation just completed by the MANUFACTURERS RECORD from items published in the Construction columns. Starting last fall with the award of millions of dollars in road work the total representing awards each month has steadily increased, and judging from the huge sums representing contemplated work for which bids have been requested, bonds voted and plans completed, the volume is yet far from the high level it is approaching.

Beginning in January with lettings valued at \$6,400,000 awards jumped to \$9,193,658 in February, and to \$11,148,078 in March, and last month showed a total representing road contracts of \$11,452,540. For the first three weeks of this month the total is \$9,941,439 in actual lettings, and on May 24 and 25 North Carolina alone awards contracts for 170 miles of highways involving the expenditure of \$3,500,000.

Practically every state in the South is sharing in this stupendous road construction program. Notable examples are North Carolina, Texas, Florida and West Virginia, which stand in the order named considering the value of awards during the first four months of 1922. Missouri, Oklahoma, Alabama and South Carolina come next in the order named.

Great Benefits From Federal Aid to Highways.

Federal Aid has been a big influence in placing the greater part of the highway work of the country in the hands of experienced engineers of the State highway departments. According to the Bureau of Public Roads, prior to 1915 about 70 per cent of the road work was done by agencies other than the State highway officials, most of it being handled by county officials. Under this method such a system was bound to lack unity and to be wasteful. Overhead costs were high, engineers were not always employed, systems to serve the best interests of the State as a whole were not developed in many cases.

With the passage of the Federal Aid act in 1916 and the insistence of the Government upon the construction of Federal Aid roads under the supervision of the State departments, existing machinery was enlarged and strengthened and in 17 states adequate departments have been created where there had been none, or the existing one was not properly equipped to perform the necessary functions.

With adequate departments the work has been shifted to their control until at present they supervise more than 60 per cent of the road work. This assures to the taxpayer the services of engineers trained in road work, a centralized authority responsible for the expenditure of funds, and a far sighted plan of development and financing.

Tests of Heavy Trucks on Road Edges.

Extensive experiments are now being conducted by the State Highway Department of Illinois in cooperation with the Bureau of Public Roads, to determine the effect of heavy trucks running near the edges of roads. A road two miles long was constructed of numerous kinds of materials and various types of construction. The tests started on March 30 with 12 trucks in operation, each having a load of 2500 pounds on each rear wheel, and these trips will continue until the suitability of the various type sections is determined. The trucks were so driven that the outside wheels were on the edge of the paving, and almost immediately some of the sections began to fail. This was expected, as some were of light design and intended primarily to demonstrate the futility

of such construction. A number of tests under the destructive pounding of the trucks will be conducted and it is expected that much valuable information will be obtained.

Bids Show Lower Price Level for Road Construction.

Confirmation of the predicted lower level of prices for road construction during 1922 is found in the reports on prices bid for 286 miles of Federal-aid roads received by the Bureau of Public Roads during the week ended April 8. The average cost per mile of some of the types of roadway, including the cost of draining and grading were:—78 miles of gravel at \$9150 a mile; 46 miles of concrete at \$29,000 a mile; 47 miles of bituminous macadam at \$25,200 a mile, and 23 miles of bituminous concrete at \$25,000 a mile.

Southern Pine Sales Continue Advance—An Index of Increased Construction Activity.

New Orleans, La., May 20.—[Special].—Sales of Southern pine lumber clearly indicate the steadily increasing volume of construction work getting under way throughout the country. Each month for some time construction has broken its previous records, and sales of lumber have increased correspondingly. This is especially true of the past few weeks, due largely to the tremendous demand for lumber of all kinds and realization on the part of scores of retailers that their stocks were entirely too small to meet the needs of the 1922 building program. Sales and shipments for the week ended April 28 surpassed all records for about four years, but reports from 128 mills for the week of May 12 indicate orders for 5095 cars containing 107,580,925 feet, giving an average of \$40,476 feet compared with the average of \$27,192 feet for the week of April 28.

During the past eight weeks with but one exception sales have averaged more than 700,000 feet per mill, compared with the average of under 600,000 feet for preceding weeks. Shipments are going rapidly forward indicating that the purchases are for immediate use in large part. Production remains practically stationary running from an average of 550,000 to 600,000 feet for the past three months, despite increased sales and shipments, which are making heavy inroads upon stocks on hand. For the week, production at 128 mills reporting was 75,214,326 feet while shipments totaled 4252 cars containing \$9,780,980 feet. At the end of the week the average unfilled orders per mill amounted to 2,632,282 feet, far above the previous high figure, while the increase in "orders on hand" amounted to 5.58 per cent. The total unfilled cars numbered 15,957.

The report for the week is as follows:

	Cars	Feet
Orders on hand beginning of week.....	15,114	319,132,110
Orders received during week.....	5,095	107,580,925
TOTAL	20,209	426,713,035
Shipments during week.....	4,252	\$9,780,980
Orders on hand end of week.....	15,957	336,932,055

Prosperity Has Returned, Says Mr. Sibley, After a Trip to Florida.

Birmingham, Ala., May 20.—[Special].—"If any one is skeptical about the return of prosperity in the commercial world, just let him take a trip through Florida," is the statement of J. W. Sibley, general sales manager of the Birmingham Clay Products Co., who has just returned from that state. "Tampa," said Mr. Sibley "is a very progressive city." They will shortly issue \$1,000,000 in bonds for municipal dock and port facilities, which when completed will enable them to handle shipments of steel, iron, coal and clay products from

Warrior river points and supply a return cargo of fruits, vegetables and phosphate rock, thus making closer and more mutually beneficial the commercial ties with the Birmingham district. Last year the Birmingham face brick shipments to the Tampa district, including St. Petersburg, were next largest to the shipments to the home market at Birmingham, even greater than Atlanta, which has always been a large consumer of our clay products.

"Florida had great fruit and vegetable crops this year," he said, "with good prices, and the whole country is full of wealth. Everywhere the mason and carpenter are busy and the greatest era of building construction ever known is in full swing. The same is true of permanent highway construction, which after all is the real basis of the great strides made by Florida in recent years, and is an incontrovertible testimony to their foresight and courage. The increase in taxable values has been many times the sum of bonds issued to pay for these essential improvements."

The same degree of building activity prevailed in certain cities of Georgia said Mr. Sibley, and on returning he found that April orders exceeded in volume any month since the armistice was signed, with all the brick plants working 100 per cent capacity and the demand steadily increasing. No longer is prosperity "just around the corner" but according to Mr. Sibley it is staring us in the face.

MECHANICAL

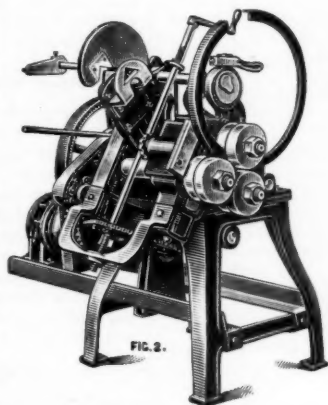
Angle Iron Bending Machine.

The angle iron circular bending machine shown in the picture herewith will cut to length and bend 2x2x $\frac{1}{4}$ inch angle iron to a true circle without twisting or defacing the angles, say the manufacturers, the Excelsior Tool & Machine Co., East St. Louis, Ill. It will also similarly handle $\frac{1}{2}$ x4 inch bar iron, and 2 inch T iron and less can be formed with the same rolls, which are adjustable to requirements, but special rolls for pipe, channel iron or any other shape within the capacity of the machine can be supplied.

It is further stated that all three rolls are driven, thereby small circles can be rolled by one pass through this machine with the ends very close together. By reversing the angles, allowing them to pass through the machine twice, both ends will be true to the circle. All angle material to be bent in circles must be of soft mild steel; re-rolled, crystallized or hard steel cannot be rolled into circles.

The machine is operated with the company's patented friction clutch and can be started and stopped under pressure. The frames are of semisteel and the rolls are made of forged tool steel hardened and driven by heavy chain gears with 14 to 1 ratio. The machine can be furnished either belt or motor driven and with or without cutter attachment.

As to the pulley and certain other features application has been made for patents. The pulley on this machine is a friction ring pulley with self adjusting features that will not require any adjusting.



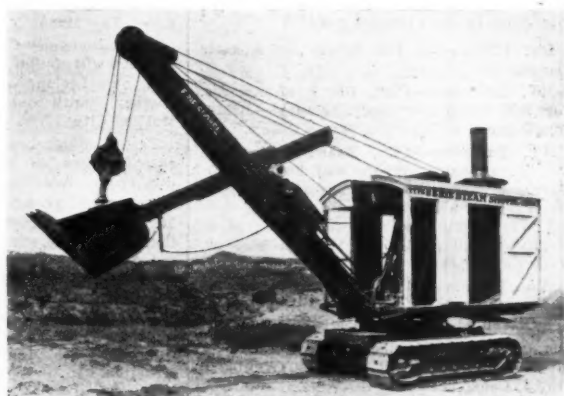
BENDING A CIRCLE.

Improved 20-Ton Steam Shovel.

A new 20-ton steam shovel recently placed on the market, the manufacturers after some months spent in developing the type having now begun to make deliveries, is the new model "B" Erie, built by the Erie Steam Shovel Co., Erie, Pa. This machine takes the place of last year's model, retaining all of its good features but embodying many others which are novel and of great advantage, having been developed as a result of reports on experience with 1700 shovels of this size now in service.

This new machine has more power, enough to handle a full sized $\frac{3}{4}$ yard dipper (water measure) even with a 21 foot boom and an 18 feet 6 inch dipper handle. There is now a reinforced truck frame stronger than ever before used, a heavier propelling shaft to stand the severest use in winter when the caterpillar treads may be frozen in. Split collars on the rear axle allow the propelling gears to be thrown out so that the shovel can be towed by a motor truck at 3 to 4 miles an hour. The traction wheel mounting is interchangeable with car wheels or with the lubricated caterpillar type mounting. The turntable casting is reinforced with flanged webs and it also has guards to keep water off the cone roller path.

A better boom hoist design allows instant accessibility to the hoisting engine crank shaft bearing and this shaft is made heavier so that the engines run smoother and longer without adjustment; there is also a better three-feed oil



THE NEW "B" SHOVEL ON CATERPILLAR MOUNTING.

pump for positive lubrication of the engines. The main swing shaft bearing has been redesigned so that bushings can easily be renewed in a few moments. All gears are machine cut instead of cast, assuring smoother operation at high speed. The boom has been improved to have greater strength in hard digging. An automatic tripping device is a great time saving feature; there is no time lost in overhauling rope to dump the dipper, which has a double hinged latch lever that does not bend if it strikes an object and the dipper itself has been strengthened.

At the power end of the shovel there is a larger boiler, one that can steam to the limit of rapid operation and to economize fuel there is an auxiliary exhaust at the rear instead of through the stack when induced draft is not needed. This exhaust also has other advantages in operation that will be appreciated and there are several other improvements around the boiler.

This shovel can be quickly converted to a locomotive crane to handle either clamshell, orange-peel or dragline bucket, or else to a steam hoe for trench excavation. It may be equipped with triple gauge trucks for railroad ditching. These special services are all in addition to the regular service of the shovel for road grading, cellar excavation, rock quarrying, coal stripping, sand and gravel excavation, etc.

Construction Department

EXPLANATORY.

The MANUFACTURERS RECORD seeks to verify and obtain additional information regarding all enterprises reported in its Construction Department, by direct daily correspondence. Further facts of news value are published later from telegraph, mail and representatives' reports. We appreciate having our attention called to errors that may occur.

DAILY BULLETIN.

The Daily Bulletin of the MANUFACTURERS RECORD is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$20.00 per year.

Bridges, Culverts and Viaducts.

Ala., Alexander City—State Highway Dept., Montgomery, Ala., will build bridge over Tallapoosa River, on Alexander City-Dadeville road; W. S. Keller, State Highway Engr.

Ala., Chunchula—Mobile County Commrs. For full detail see Mch. Wanted—Bridge Construction.

Fla., West Palm Beach—Palm Beach County will build draw bridge over Jupiter Narrows, on Jupiter road crossing Scovies Pocket, cost \$40,000; build bridges across canal at several places; also construct roads; vote June 15 on \$150,000 bonds.

Ga., Tifton—For full details see Electric Plants.

Md., Baltimore—City, Board of Awards. For full detail see Mch. Wanted—Bridge Construction.

Md., Baltimore—City, Board of Awards. Wm. F. Broening, Prest., will build 716-ft. Warren bridge and approaches over Gunpowder River, Baltimore County; lowest bidder, Whiting-Turner Construction Co., Stewart Bldg., at \$156,000; Wm. A. Megraw, Water Engr.; H. Leaverton, Plant Engr.

Miss., Byram—Hinds County Board of Suprvs., Jackson, Miss. For full detail see Mch. Wanted—Bridge Construction.

Miss., Macon—Noxubee County, Board of Suprvs. For full detail see Mch. Wanted—Bridge Construction.

Miss., Natchez—Board of Suprvs. For full detail see Mch. Wanted—Bridge Construction.

Mo., Boonville—City, Chas. G. Miller, Clk., let contract to W. J. Cochran & Son, at \$44,970.75, to build concrete and stone approach to highway bridge over Missouri River.

Mo., Ironton—State Highway Dept., Jefferson City, Mo. For full detail see Mch. Wanted—Bridge Construction.

Mo., Maryville—Nodaway County. For full detail see Mch. Wanted—Bridge Construction.

Mo., Reeds Springs—Missouri Pacific R. R., E. A. Hadley, Ch. Engr., St. Louis, Mo., let contracts to Jerome Moss, Chicago, Ill., Roach and Stanzel, Memphis, Tenn., and Walter Dennison, Cushman, Ark., at \$100,000, to replace 10 wooden trestles between Reeds Springs, Mo., and Crickett, Ark., White River Div.; some trestles 150-ft. long.

North Carolina—North Carolina State Highway Comsn. For full detail see Mch. Wanted—Bridge Construction.

N. C., Elkin—Town Commrs. let contract to R. M. Thurmond Co., Lynchburg, Va., at \$16,700 to build reinforced concrete bridge across Elkin Creek; J. W. Ring, Mayor; Pe-

gram & Reynolds, Consit. Engrs., 501 Wachovia Bank Bldg., Winston-Salem, N. C.

S. C., Abbeville—Abbeville County Highway Comsn., L. E. Keller, Secy., will build bridges and culverts on Abbeville-Greenville and Abbeville-Antreville roads; 3 reinforced concrete bridges; 3 reinforced concrete box culverts; contract let to Palmetto Constr. & Concrete Co., Columbia, S. C., at \$33,575.34; H. B. Humbert, County Engr.

S. C., Wateree—Richland-Calhoun Bridge Comsn. For full detail see Mch. Wanted—Bridge Construction.

Tenn., Nashville—City will construct viaduct; vote June 22 on \$375,000 bonds. Address The Mayor.

Tex., Houston—City, O. F. Holcombe, Mayor, will build reinforced concrete culvert on Leeland Ave. road; low bidder, Starkey, Smith and Brown, at \$6627; J. C. McVea, City Engr.

Tex., Nacogdoches—Nacogdoches and Cherokee Counties will rebuild bridge over Angelina river. Address County Commrs.

Tex., San Antonio—City, O. B. Black, Mayor, let contract to Elder Construction Co., at \$10,185, for abutments on roadway for Navarro St. bridge; and at \$28,500 to construct Mill (Garden St.) Bridge; Terrell and Bartlett, Engrs.

West Virginia—State Road Comsn., Charleston, W. Va., will build 2 bridges. For full detail see Mch. Wanted—Bridge Construction.

Canning and Packing Plants.

Fla., New Port Richey—New Port Richey Non-Partisan Club interested in establishing cannery.

Ky., Owensboro—Field Packing Co. will erect building and improve plant; boiler house, 40x50 ft., hollow tile; cold storage plant, 45x100 ft., 48,000 cu. ft. of floor space, brick, concrete and steel; fireproof; Henry Vogt Machine Co., Louisville, contractor for 250 H.P. boiler and boiler equipment; H. C. Christiansen, Chicago, Archt.; company in charge of construction.

Clayworking Plants.

Okla., Clearview—Bricks—Clearview Brick Plant, capital \$30,000, incptd. by James E. Thompson, Mary Doggett, J. W. Swain.

W. Va., Hookersville—Muddlety Valley Clay Products Co., capital 10,000, incptd. by K. B. McCue, Porter Herold, D. H. Fletcher, all of Persinger, W. Va.

Coal Mines and Coke Ovens.

Ala., Birmingham—Consumers Clay & Coal Co., incptd. by H. P. Stephens, R. B. MacIn and R. L. Crawford.

Ky., Pineville—Gaddie Coal Co., organized with W. H. Gaddie, Prest.; F. M. Meadows, Secy.; mine in operation with 150 tons daily

output. (Lately noted incptd., capital \$10,000.)

Mo., St. Louis—New Era Coal & Mining Co., capital \$20,000, incptd. by Fred W., Edwin F. and Sophia Kleine.

Mo., Kirksville—Kirksville Coal Co., capital \$150,000, incptd. by Robert McKicker, P. T. and William Benson, all Boone, Iowa; purchased Rye Creek mine, improve plant and install equipment.

Tenn., Chattanooga—Whiteside Steam Coal Co., capital \$80,000, incptd. by A. T. Whiteside, W. G. M. Thomas and F. S. Darwin.

Tex., Milam County—Empire Fuel Corp., E. B. Neuswanger, Prest.-Gen. Mgr., Dallas County Bank Bldg. plans developing lignite holdings; increased capital to \$5,000,000.

W. Va., Elkins—Washington-Elkins Coal Co., capital \$300,000, incptd. by C. A. Parvin, E. L. and W. B. Maxwell.

W. Va., Fairmont—Behler Coal Co., capital \$50,000, incptd. by H. Shain, M. A. Joliff and S. J. Snyder.

W. Va., Holden—Island Creek Coal Co. will construct by own forces machine shop and winding room. (Lately noted burned at loss of \$75,000.)

Concrete and Cement Plants.

Md., Baltimore—Cement Tile—American Tile & Cement Co., 1124 Watson St., increased capital to \$25,000.

Tenn., Nashville—Cement—Hermitage Portland Cement Co., R. T. Miller, Secy., 174 Third Ave., North, Nashville, Tenn. has buildings, will buildings, will install cement mill mch., approx. cost \$1,000,000; bids open July 1; daily output 2000 bbls. Old Hickory Brand cement. Lately noted. (See Mch. Wanted—Cement Mill Machinery.)

Cotton Compresses and Gins.

Ark., Brinkley—Chamber of Commerce, interested in establishing cotton compress.

Ark., Paragould—Bertrig Bros. will rebuild cotton gin burned at loss of \$35,000.

Miss., Artesia—Chamber of Commerce interested in establishment of cotton ginnery.

Tex., Caldwell—J. N. Halsler, R. 2, Box 52, interested in establishment of cotton gin.

Tex., Robstown—H. T. Ahrens, Charlotte, Tex., C. A. Luecke, Caldwell, Tex., purchased and will improve Caldwell gin; six 70 stands and cleaning system to be installed.

Drainage Systems.

Fla., Courtenay, Merritt Island—Sykes Creek Drainage Assn., W. J. Dillon, Secy.-Treas. has under construction 25 ft. canal full length of Sykes Creek from open water at north to open water on south; reclaiming thousands of acres of land in Brevard County.

Mo., Linneus—Locust Creek Drainage Dist., E. B. Firds, Secy., Browning, Mo. let contract to Callahan, Walker Construction Co., Omaha, Neb. to construct earth ditch; \$197,240.40; reclaiming 16,600 acres in Linn and Sullivan Counties; Clark E. Jacoby Engineering Co., Engr., Kansas City, Mo.

Electric Plants.

Ala., Brewton—City let contract for in-

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

stallation of equipment at power plant; including 320 H.P. engine, 250 K.W. generator; cost about \$10,000.

Ark., Lepanto—City, F. M. White, Mayor, will install electric light, cost \$32,000.

Ark., Ft. Smith—City let contract to Ft. Smith Light & Traction Co. to install white way.

Fla., Bunnell—Town, Geo. Moody, Managing Official, construct plant to develop 75 H. H. with 50 K.V.A. generator, Charles Harris, Box 72, Engr. in charge. (See Mch. Wanted—Engines (Oil) Electric Equipment.)

Fla., Homestead—City will expend \$50,000 for light plant extensions. Address The Mayor.

Fla., Orlando—Orlando Water & Light Co., J. Y. Cheney, Mgr., let contract to Gas Machinery Co., Cincinnati, O. for mch. for plant; quadruple capacity of plant.

Fla., Quincy—For full detail see Water-Works.

Fla., St. Petersburg—City let the following contract for power engines and equipment: at \$165,970 to McIntosh & Seymour Corp., Auburn, N. Y. for Diesel engines and installation; General Electric Co., Schenectady, N. Y., at \$45,000 for electrical equipment.

Ga., Tifton—City voted \$75,000 bonds for electric lights, water works and sewer extension, and bridges. Address The Mayor.

Md., Baltimore—Consolidated Gas, Electric & Power Co., plans to extend sub-station in McClelland alley; contract for electrical equipment, consisting of 16,000 ampere, 25 cycle, booster converter with air blast transformer and switchboard let to Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Miss., Artesia—Chamber of Commerce interested in establishing electric light plant.

Mo., Crane—Lawrence County Light & Water Co. applied for franchise for street lighting.

Tenn., Germantown—City, J. M. Thompson, Clk. will construct plant; cost \$15,000, develop 35 H.P.; Orgill Bros., Memphis, Mch. Contrs. (See Mch. Wanted—Electrical Equipment.)

Tenn., Nashville—City appropriated \$18,600 to rebuild and equipping light and power plant, recently burned. Address The Mayor.

Tex., Longview—Town closed contract with Southern Public Utilities Co. to furnish current for street lighting system.

Va., Boydton—Staunton Power Co., capital \$50,000, inctpd. with D. F. Clark, Prest.; E. L. Baptist, Secy.; distribute electric current through Halifax, Charlotte, Campbell, Lunenburg, etc. for lighting and power.

Va., Clifton Forge—Council Finance opens bids June 10 to erect light plant.

Va., Richmond—Southampton Light & Power Co., capital \$5000, inctpd. with John H. Guy, Prest., Richmond; D. W. Barrett, Secy.; distribute current through Henrico and Chesterfield counties for lighting and power.

Fertilizer Plants.

Fla., Lakeland—Non-Acid Fertilizer & Chemical Co., C. W. Deen, Prest.; H. E. Memminger, Mgr., will erect plant; mill construction; 50,000 tons non-acid phosphate and complete fertilizer yearly; install dryers, boilers, engines, tanks, storage and agitator, mixing plant; H. E. Memminger, Constr. Engr., H. D. Mendenhall, Archt. (See Mch. Wanted—Fertilizer Equipment; Boilers; Engines.)

Fla., Tampa—Nelson Motor Fuel & Fertilizer Co., capital \$100,000, inctpd. by C.

W. Nelson, Bert M. Banker and Paul S. Maxwell.

Flour, Feed and Meal Mills.

Ky., Sadieville—New Era Milling Co., capital \$12,000, inctpd. by W. W. McCabe, A. L. McCabe, P. L. Conleton.

La., Lake Charles—Rice—Lake Charles Rice Milling Co., J. Alton Foster, Mgr., considering erection of mill at deep water port.

N. C., Asheville—G. M. Felmet of White Pine, Tenn. purchased machinery of Biltmore Milling Co. and leased building; will operate.

Foundry and Machine Plants.

Md., Baltimore—Implements—O. F. Reiter Mfg. Co., 200 N. Holliday St., capital \$100,000, inctpd. by Otis F. Reiter, Samuel Goldman and Eugene V. von Newendorf.

Md., Baltimore—Brass—Edro Richardson Brass Co., Edro Richardson, Prest., 318 N. Holliday St. purchased group of buildings, remodeled; move mch. from present plant.

Mo., St. Louis—Cast Wheels—Ideal Equipment Co., inctpd. by Chas. E. Roberts, J. B. Dale and Raymond Kaemmerer.

Tenn., Chattanooga—Soll Pipe—Sommer-ville Iron Works, T. I. Bush, let contracts for plant improvements, double capacity.

Tex., Beaumont—Pattern Shop, etc.—Service Foundry Co., reported to erect foundry and pattern shop, purchased site.

Tenn., Knoxville—Castings, etc.—Fire Grate Radiator Heating Corp., capital \$500,000, inctpd. with C. F. Hodges, Prest.; J. S. Hodges, Secy-Treas.; has plant for mfr. of fire grate radiator heater, general foundry casting work and brass moulding.

W. Va., Fairmont—Glass Machinery—A. B. Knight, 117 E. Park Ave., will erect 1 story 75x90-ft. fireproof building, probably built by J. M. Kisner & Bros.; install equipment for mfr. of glass mch. and general repair work.

Gas and Oil Enterprises.

Ark., El Dorado—Harbor Oil Corp., capital \$1,000,000, inctpd. by S. Williams, L. T. Langston and C. J. Lockhart.

Ky., Eden—Martin County Coal, Oil & Gas Co., capital \$20,000, inctpd. by L. A. and Mary J. Dempsey, C. B. Wheeler.

Ky., Franklin—Vi-car Oil & Refining Co., capital \$100,000, inctpd. by D. T. Blakey and John S. Milliken.

Ky., Paintsville—American National Petroleum Co., capital \$60,000, inctpd. by Herbie Stambaugh, M. F. Patrick, D. G. Sublte.

Tenn., Mt. Pleasant—Standard Oil Co. will erect filling station.

La., Hammond—Delta Natural Gas Co., organized to construct pipe line from Monroe gas fields to New Orleans, approximately 250 ml.

Mo., Springfield—J. P. Cantrell Oil Co. will construct filling station and two 25,000 gal. storage tanks; cost about \$40,000.

Okla., Henryetta—Turin Oil & Gas Co., capital \$40,000, inctpd. by Frank and James Masino of Henryetta, Charley Stura, Coal-ton, Okla.

Okla., Tulsa—Summit Supply & Oil Products Co., capital \$150,000, inctpd. by B. M. Gessel, W. O. Dickenson.

Okla., Tulsa—Ny-Okla. Oil & Gas Co., capital \$100,000, inctpd. by W. J. Kerwin, W. W. Williams.

Tex., Archer City—Dakmar Oil Co., capital \$10,000, inctpd. by Harold K. Dycus, Geo. T. Abercrombie, J. N. Longley.

Tex., Cameron—Owens Petroleum Co., cap-

ital \$30,000, inctpd. by J. S. Owens, C. E. Mays, J. R. Mays.

Tex., Clarksville—Texas Petroleum Co., W. W. Fisher, Prest., Fort Worth, will construct two unit refinery; capacity 500 bbls. daily.

Tex., Desdemona—May Oil Co., capital \$10,000, inctpd. by Jack Frost, W. J. Oxford, F. E. Shyrock.

Tex., Eastland—Eastland County Gas Co., inctpd. by E. R. Bahan, H. S. Garrett, M. J. Adams.

Tex., Eastland—Gordon Petroleum Co., increased capital to \$150,000.

Tex., Houston—Gulftex Oil Co., inctpd. by C. M. Hightower, R. W. Adams, Jr., I. G. Butler.

Tex., Orange—Thrift Co., capital \$150,000, inctpd. with J. G. Sutton, Prest.; Vinton, La.; C. P. Martin, V.-P., Lake Charles, La.

Tex., Perryton—People's Supply Co., increased capital to \$25,000.

Tex., Port Arthur—Port Arthur Co-Operative Supply Co., capital \$40,000, inctpd. by A. E. Albright, W. L. Caudle, E. S. Marshall.

Tex., San Antonio—G. A. X. Oil Co., capital \$18,000, inctpd. by L. G. Hefferman, D. V. Gaffney, F. H. Borum.

Tex., San Antonio—San Antonio Natural Gas Co. of Wilmington, Del., capital \$100,000, to develop gas in Texas.

Tex., Texas City—C and C Oil Co., capital \$100,000, inctpd. by O. B. Crozier, F. H. Cole, T. C. Sullivan.

Va., Norfolk—Gas Plant—City Gas Co., of Norfolk, T. Norman Jones, General Mgr. let contract for improvements to City gas works costing about \$175,000; including 1,000,000 ft. gas holder, boiler works, extension of gas mains; Cruse-Kemper Co., Ambler, Pa., contract for constructing gas holder, cost \$122,000, C. B. Cross Co., Norfolk, for foundation for this construction; increasing capacity of holder to 2,500,000 ft.; boiler to cost \$31,500 to be constructed by company.

W. Va., Clarksburg—Little Hocking Valley Oil & Gas Co., capital \$50,000, inctpd. by G. W. McCain, Harvey V. Varner, Rosel L. Fotty.

Hydro-Electric Plants.

Va., Bristol—C. H. White of Elizabethton, Tenn., and W. Jocelyn E. Dail, reported interested in hydro-electric development on Watauga river.

Ice and Cold-Storage Plants.

Fla., Leesburg—W. E. Rogers, Mgr. Municipal Ice Plant, plans improvements, capital \$50,000.

Miss., Hazlehurst—I. N. Ellis, interested in establishment of \$15,000 ice plant.

Miss., Newton—Newton Ice & Fuel Co., capital \$10,000, inctpd. by Chas. A. Zilker, W. W. Johnson and others.

Mo., Hartsville—M. F. Palmer, contemplates establishing ice plant.

Mo., Laclede—Henderson Produce Co. install cold storage dept., capacity 3 cars; has under construction improvements to plant.

Mo., St. Louis—Mertens Ice & Fuel Co., capital \$200,000, inctpd. by T. W., J. H. and O. J. Mertens.

N. C., Charlotte—Felix Hayman, N. Tryon St. reported to expend \$50,000 on establishment of cold storage plant, purchased building, remodel.

N. C., Shelby—Ideal Ice & Fuel Co., organized with A. P. Weathers, Prest.; C. A. Turner, Secy-Treas.; let contract to York

Mfg. Co., York, Pa. to install 10 to 12 ton ice plant.

Tex., San Augustine—San Augustine Ice Co., W. P. Wood, Prest. let contract to Frick Company, Waynesboro, Pa. to install plant. (Lately noted inceptd., capital \$20,000.)

Va., Stuart—Stuart Cold Storage Corp., chartered with G. T. Divers, Prest.; J. F. Reynolds, Secy.

Irrigation.

Tex., San Benito—San Pedro Irrigation & Development Co., capital \$72,000, T. H. Slussen, A. L. Montgomery and Samuel Spears.

Iron and Steel Plants.

Ala., Birmingham—Steel Bars, etc.—Southern Steel & Rolling Mill, M. J. Gerson, Prest., increased capital to \$200,000.

Land Developments.

Fla., Jacksonville—City will develop 146 acres of land at Moncrief Heights for golf park. Address The Mayor.

Ga., Albany—Kinchafoonee Pecan Co., capital \$25,000, inceptd. by W. L. Crawford, L. L. Ferree.

Ga., Macon—Edward Haile Seed Co., capital \$10,000, inceptd. by A. H. Edwards, J. T. Haile, C. A. Edwards.

Ky., Lexington—McCormick Land Co., capital \$50,000, inceptd. by S. Fred McCormick, Sam H. and Leslie C. McCormick.

Ky., Seco—Millstone Land Co., capital \$10,000, inceptd. by S. T. and B. F. Wright, Henry Pfening, Jr.

Md., Creagerstown—Creagerstown Cemetery Co., inceptd. by Wm. J. Martin, James G. Stevens, Wm. H. Long.

Miss., Clarksdale—Tropical Planting & Trading Corp., capital \$250,000, inceptd. by H. C. Buck, Jr., New York, J. O. Lamkin, Clarksdale, W. O. Hinkle, Memphis, Tenn.

Mo., Walnut Grove—Walnut Grove Improvement Co., capital \$6000, inceptd. by G. E. Brim, John S. McElmore, B. F. Cantrell; establish electric and water plant.

N. C., Charlotte—E. S. Draper, Landscape Archt. and City Planner, 11 E. 5th St., has been retained for the following development work: Mechlenberg County Home and new Detention Home, Charlotte; Miss Theda Buck, Bluefield, W. Va., to improve cemetery lot; Dr. Jas. J. Phillips, Raleigh, N. C. and Louis Lipinsky, Charlotte, Jos. Holt, Myers Park, Charlotte, for development of residential estate.

N. C., Raleigh—North State Peach Co., capital \$250,000, inceptd. by Henry C. Wall, R. S. L. Davis, John L. Everett, all of Rockingham, N. C.

Okla., Tulsa—Baird Sullivan Co., capital \$25,000, inceptd. by L. D. Baird, W. L. Sullivan, Thomas E. Shea.

S. C., Andrews—H. J. Wessel Co., capital \$5000, inceptd. with H. J. Wessel, Prest.; H. L. Smith, Jr., Secy.

S. C., Charleston—Jackson Realty Co., capital \$10,000, inceptd. with W. H. Powers, Prest.; Geo. T. Trescott, V.-P.; H. N. Norris, Secy.

Tenn., Chattanooga—Realty Trust Co., 117 E. Eighth St., capital \$50,000, inceptd. by Roland Olmsted, J. F. Crabtree.

Tex., Houston—Valley Citrus Orchard Co., C. L. Hunter, Prest., lately noted inceptd. with \$100,000 capital plans to expend \$75,000 in developing 200 acres of land in lower Rio Grande Valley, near Brownsville, for citrus grove and homesite, etc.

Va., Petersburg—City will improve Lee

Memorial Park; \$12,600 available. Address The Mayor.

Va., Petersburg—Pembroke Land Corp., B. C. Syms, Prest., lately noted inceptd. with \$50,000 capital will develop 60 acres for subdivision; install cement walks, water and sewer, cement walks, etc.

W. Va., Bluefield—Mercer Development Co., capital \$10,000, inceptd. by D. C. Johnson, G. D. Hill, Elmer Brown.

W. Va., Charleston—Coyle Realty Co., capital \$150,000, inceptd. by Geo. F. Coyle, E. D. Truslow, D. W. Hill.

W. Va., Charleston—East Woodland Realty Co., capital \$100,000, inceptd. by T. W. Shields, Frankfort, E. C. Stanton, W. C. Barger, both of Charleston.

W. Va., Welch—Home Investment Co., capital \$25,000, inceptd. by Samuel Polon, Moses Hyman, Samuel Solins.

Lumber Manufacturing.

Fla., Pensacola—Ferris-Lee Lumber Co., plans building kiln of brick construction, double track.

Ga., Athens—Athens Saw & Planing Co., capital \$10,000, inceptd. by J. P. Carter, V. J. and S. J. Moss.

Ga., Tennesse—T. J. Cooper Lumber Co., Sandersville, Ga. contemplate installing small planing mill and dry kiln. (Lately noted inceptd.)

Md., Baltimore—J. L. Gilbert & Brother Company, Eastern and E. Falls Ave., let contract to Charles L. Stockhausen Co., Gay and Water Sts., to erect 2-story, 10x120-ft. plant, brick construction; approximate cost \$30,000.

Md., Glen Burnie—J. F. Johnson Lumber Co. increased capital to \$150,000.

Mo., Kansas City—Missouri Walnut Lumber Co., capital \$10,000, inceptd. by D. Adkins, R. F. Crawford and W. F. Roth.

Tex., Dallas—Higginbotham-Bartlett Co., increased capital to \$1,100,000.

Tex., Eagle Pass—Eagle Pass Lumber Co., increased capital to \$400,000.

Tex., Houston—Willis Lumber Co., capital \$25,000, inceptd. by T. E. Johnson, R. C. Wilcox and R. C. Conn, Jr.

Va., Richmond—Bedford Timber & Land Corp., 417 Mutual Bldg., M. M. Marouse, Secy.; timber holdings limited to 300,000 acres.

Metal-Working Plants.

Ala., Birmingham—Signal Devices—Southern Signal Co., inceptd. with J. E. Clough, Prest., Louisville, Ky.; George Lancy, local representative; mfr. railway signal devices.

Fla., Miami—Blow Torch—Huff Mfg. Co., Hugo C. Eastman, Secy., will erect 35x120-ft. fireproof plant, \$8000, bids open; install lathes, gigs, electrical appliances for mfr. of gas burner blow torch; mchy. purchased.

Md., Baltimore—Insulators—Locke Insulator Corp., Donald F. Symington, Prest., 1005 Maryland Trust Bldg. let contract to J. Henry Miller, Inc., Balto., to erect 80x80-ft. fireproof, saw tooth construction building; Parker, Thomas & Rice, Union Trust Bldg., Conslt. Archt. (Lately noted.)

Tex., Houston—Sheet Metal—Davis-George Mfg. Co. increased capital to \$1,000,000.

Tex., San Antonio—Locks, etc.—Claussen Lock & Safe Co., 616 Market St., lately noted inceptd.) organized with H. H. Claussen, V.-P. and Mgr.; has plant, install drill press, electric grinder and oxy-acetylene torch; mfr. vault door safety lock, present daily capacity 50 locks. (See Mchy. Wanted—Drill Press; Grinder (Electric); Oxy-Acetylene Torch.)

W. Va., Parkersburg—Wire—Seward Wire Co. (lately noted inceptd., capital \$150,000) organized with Thomas J. Seward, Prest.; L. N. Hemmenway, Secy.-Treas.; let contract to Plate & Vogel to erect 80x200-ft. mill construction building; purchased mchy.; daily output 600,000 ft. rubber covered insulated wire; T. J. Seward Co., Const. Engr., 17 W. 42nd St., New York.

Mining.

Mo., Annapolis—Lead—Annapolis Lead Co., M. C. Rhodes, Prest., 1217 International Life Bldg., St. Louis, Mo. let contract to Stupp Bros., St. Louis, to erect 60x80-ft. power house, 40x80-ft. crusher building and 80x180-ft. concentrator, steel and corrugated iron construction; install general mining and milling mchy., turbines, stokers, condensers, etc., bids opened; Baumes McDewitt, Archt. for power house, St. Louis; General Engineering Co., Engr., for mill, Salt Lake City, Utah.

Mo., St. Louis—Copper, etc.—Richwoods Development Co., capital \$100,000, inceptd. by A. E. Stocking, R. M. Homer and J. K. Lord, Jr.

Okla., Woods County—Salt—Santa Fe Salt Co., P. L. Clifton, Prest.-Mgr., Pomroy, O.; build plant of special construction, force account work; install oil engines, pumps and conveyors; daily capacity 200 tons salt; C. T. Cavan, Const. Engr., Waynoka, Okla.; H. S. Bowen of Robert W. Hunt Co., Chicago, Ill., Archt. Lately noted. (See Mchy. Wanted—Engines (Oil); Pumps; Conveyors.)

Va., Goshen—Glass Sand—N. Q. Speer Co. will install plant for production of glass sand.

W. Va., Huntington—Kentucky Minerals Co., capital \$50,000, inceptd. by J. H. Holt, H. C. Duncan, Jr., and C. S. Williams.

W. Va., Marion—Sand—Marion Central Sand Co., capital \$100,000, inceptd. by H. H. Lanham and D. H. Morgan, Fairmont, W. Va.; G. W. Otto, Wheeling, W. Va.

Miscellaneous Construction.

Fla., Lauderdale—Inlet—Broward County Comms. plans dredging New River Inlet and construct stone jetties and repair walls; Geo. B. Hills Co., Engr., Jacksonville, Fla.

Fla., Little River—Windmill Tower, etc.—P. S. Shearer, Miami, Fla. has contract to erect 30x40-ft. tower building, to support wheel measuring 65 ft. tip to tip of sails; R. A. Pleas, Archt. and Engr. in charge; Max Froehlich, erect motor to pump water for irrigation purposes and generate electric current.

Fla., West Palm Beach—Dredging—Andersen Dredging Co., capital \$50,000, inceptd. with A. S. Andersen, Prest.; W. H. DaCamara, Secy.-Treas.

Mo., Springfield—Elevator—Chamber of Commerce interested in erection of terminal grain elevator.

N. C., Wilmington—Channel, etc.—C. C. Chadbourne, Chrmn. Board of Navigation, interested in proposed 30 ft. channel between Wilmington and the sea; removing a shoal in Cape Fear River between Wilmington and Navassa.

N. C., Wilmington—Monument—Mrs. W. L. Beery, and others interested in erection of memorial monument to Confederate soldiers; estimated cost \$20,000.

Tex., Anson—Drainage Structures—Jones County Comms. plans replacing drainage structures; contemplate bond issue; E. S. Cumming, County Judge.

Tex., Houston—Bunkering Plant—Channel Fuel Co., Great Southern Bldg. let contract to Guarantee Construction Co., 140 Cedar St., New York to construct coal bunkering plant,

500 ft. frontage on channel, storage capacity 50,000 tons, coal a ship at rate of 150 tons per hr.

Tex., Fort Worth—Levee—City Comms. contemplate building 50 ft. dirt levee around Holly pumping plant; D. L. Lewis, City Engr.

Va., Bristol—Channel Improvements. City. S. G. Keller, Mgr. let contract to R. M. Thurmond & Co., Lynchburg, Va. to straighten Beaver Creek channel and walled with concrete, bed of stream surfaced with concrete between the two streets; \$12,000.

Va., Norfolk—Piers—Merchants & Miners' Transportation Co., foot of W. Main St. plans rebuilding, south pier, 600 ft. long, frame with galvanized iron covering; construction by company's forces.

Miscellaneous Enterprises.

Ala., Birmingham—Newspaper—Birmingham News Co., Victor H. Hanson, Mgr., 4th Ave. and 22nd St. let contract to Smallman-Brice Construction Co. to erect 57x83-ft.; 2 story and basement also 5 story and basement 83x83-ft. addition to present building, fireproof; \$65,000; Warren, Knight & Davis, Archts.

Ala., Birmingham—Construction—Cherokee Construction Co., inctd. by J. F. Rose, W. O. McSwain and Lella A. Emerson.

Ala., Birmingham—Printing, etc.—General Printing & Stationery Co., inctd. by Edward L. Della Mae and John E. Bomar.

Ala., Montgomery—Laundry—Capital City Laundry, C. M. Smith, Propr., 901 Madison Ave. let contract to F. J. Crampton and I. O. Anderson, to erect main building 137x164-ft., one 30x50-ft., one 20x25-ft. and one 15x30-ft., also 10 frame cottages; install mch. for all classes of laundry; material and equipment all purchased. (Lately noted.)

Ark., Stuttgart—Construction—Layne Arkansas Co., capital \$10,000, inctd. with Lloyd Layne, Prest.; irrigation and well construction.

Fla., Homestead—Fire Equipment—City, improve fire fighting dept., has \$5000 available. Address The Mayor.

Fla., Miami—Construction—Atlantic Builders, capital \$10,000, inctd. by C. L. McGinnis, W. L. Brown and J. E. Price.

Fla., Miami—Construction—Atlantic Construction Co., capital \$20,000, inctd. by Van Allen Harris, H. E. Graham and W. E. Walsh.

Fla., Tallahassee—Amusements—Independent Theaters Assn., capital \$10,000, inctd. by Carl Kettler, Carson Bradford and Harold W. Rosenthal.

Fla., West Palm Beach—Printing—Castlen Prest.; Robert Castlen, Secy.-Treas.; purchased established plant; improve, installing additional equipment, etc.

Ga., Acworth—Potato Curing—Acworth-Ervin Co., organized with Ed. Castlen, Board of Trade, interested in establishing 10,000 bu. capacity potato curing house.

Ga., Savannah—Construction—Southern Finance & Construction Corp., capital \$50,000, inctd. by Harvey Granger, Oliver T. Bacon and B. B. Neal.

Ky., Alexandria—Amusements—Alexandria Amusement Co., inctd. by Joseph Trapp, Charles Youtsey and Clifford B. Gosney.

La., Monroe—Hardware—Marx Hardware Co., capital \$10,000, inctd. by Joe Marx, Jr., Prest.-Mgr.; Mrs. Albert Well, Secy.-Treas.

Md., Baltimore—Plumbing—Creston E. Jackson Co., 15 E. Fayette St. capital \$10,000, inctd. by Joseph C. Smith, Joseph L. Lichtenberg and Harry O. Levin.

Md., Baltimore—Newspaper Plant—The Frank A. Munsey Company, 218 Broadway, New York, owners of The Baltimore News and The Baltimore American, purchased 20,000 sq. ft. site at S.E. corner, Courtland and Center Sts.; erect after Jan. 1, 1923, when land will be available for use, complete manufacturing plant for the two papers; two story and basement building, 200 by 96 feet; plans not yet prepared and no details available; probably be handled through New York.

Md., Baltimore—Heating Plant, etc.—Board of Estimates, expend \$40,000 on repairs to heating system and power plant at Bay View; C. L. Reeder, Const. Engr., 916 N. Charles St.

Md., Cambridge—Amusements—Beach Haven Amusement Co., capital \$15,000, inctd. by Eber Crandle, Thomas William Cowley and P. Sherwood Yates.

Miss., Sumner—Hardware—Farmers Hardware & Furniture Co., capital \$10,000, inctd. by M. P. Sturdivant, H. P. and T. C. Buford.

Mo., Kansas City—Construction—King Excavating & Constructing Co., capital \$20,000, inctd. by Geo. King, P. E. Kennedy and W. E. Rodgers.

Mo., St. Louis—Lithographing, etc.—Gar Rod Co., capital \$15,000, inctd. by R. J. Garstang, G. F. Rodawald and I. A. Tabor.

Mo., St. Louis—Construction—May Investment Co., capital \$20,000, inctd. by J. F. McDermott, Geo. H. Meyericks and A. A. Weiss.

Mo., St. Louis—Construction—Central Mortar & Supply Co., capital \$25,000, inctd. by Oscar H. Hentschel, Raleigh and John H. McCormick, Jr.

Mo., Webster—Plumbing—Clamp Prehn Plumbing Co., inctd. by A. L. Prehn, W. F. and L. P. Clamp.

N. C., Charlotte—Publishing—A. H. Turney, Prop. and Mgr. of Western Newspaper Union, 209 N. Graham St., will rebuild burned plant.

Okl., Ada—Publishing—Bulletin Publishing Co., capital \$10,000, inctd. by L. R. Clark, Thomas P. Holt and others.

S. C., Denmark—Construction—Mayfield Construction Co., capital \$20,000, inctd. with J. K. Mayfield, Prest.-Treas.; C. M. Cox, Secy.

S. C., Prosperity—Hardware—Wise Hardware Co., inctd. with A. Wise, Prest.-Treas.; W. Wise, Secy.

N. C., Greensboro—Incinerator—City, plans constructing incinerator plant, purchased site. Address Mayor Kiser.

S. C., Georgetown—Plumbing—Sanitary Plumbing Corp., chartered with C. C. Phillips, Prest.; Walter H. Phillips, Secy.-Treas.

Tenn., Knoxville—Printing—American Jobbing Co., capital \$50,000, inctd. by M. G. Hornaday, J. S. Englerth and George R. Neuhardt.

Tenn., Nashville—Construction—Warren County Construction Co., capital \$30,000, inctd. by Charles S. Simpson, J. T. Calhoun and L. W. Cox.

Tex., Dallas—Publishing—Boyd-Patterson Co., capital \$75,000, inctd. by W. R. Boyd, W. R. Patterson and L. F. Reardon.

Tex., El Paso—Construction—Herbert W. Gehring Co., capital \$20,000, inctd. by H. W. and Madeline M. Gehring, H. G. Smith.

Tex., Fort Worth—Laundry—Cascade Laundry Co., 605 W. Railroad Ave. organized with Wm. Capps, Prest.; Count B. Capps, Secy.-Treas.; purchased established plant, improvements underway. (Lately noted inctd., capital \$50,000.)

Tex., Tyler—Hotel—Tyler Hotel Co. increased capital to \$170,400.

Va., Richmond—Construction—Wise Granite & Construction Co., increased capital to \$100,000.

Miscellaneous Factories.

Ala., Birmingham—Medicines—Paxtonic Blood Food Co., capital \$50,000, inctd. with Frank Russtein, Prest., J. T. Hester, V.-P., J. Reese Murray, Secy.

Ala., Sellers—A. E. Davis Permanent Ink Co., capital \$100,000, inctd. by Z. E. Davis, Sellers; T. A. Bullard, W. C. Naftel, both LaPine, Ala.

Md., Baltimore—Radio—Internatl. Radio Corp., Equitable Bldg., capital \$5000, inctd. by Harry C. Hand, Robert K. Thistle, A. Roy Myers.

Ark., Pine Bluff—Creamery—W. D. Hearn, Secy. Chamber of Commerce, interested in establishing \$50,000 creamery.

Ark., Pine Bluff—Creamery—W. H. Woodburn, Paragould, Ark., will construct \$250,000 creamery.

D. C., Washington—Bottling—Purity Bottling Corp., capital \$10,000, inctd. by Geo. I. Shefts, John J. and Jerry C. Falvey.

Fla., Tampa—Radio—Capt. Robt. Lee Coston, Fort Worth, Tex. establish plant to mf. radio sets.

Ga., Atlanta—Calendars—Anydate Calendar Co., capital \$25,000, inctd. by John B. and Annie Maud Hutchins.

Ga., Dublin—Paints—Southern Mfg. Co., establish paint plant; L. H. Harville, in charge.

Ga., Lagrange—Bottling—Merchants Lime-Cola Bottling Co., capital \$20,000, inctd. by J. A. Longshore, E. R. Taylor.

Ga., Lawrenceville—Medicine—Lees-Tone Co., capital \$100,000, inctd. by H. B. and Ada Lee.

Ky., Louisville—Clothing—Big Six Clothing Mfg. Co., capital \$30,000, inctd. by Louis Louis Waxmann Samuel Goldstein.

Ga., Macon—Bakery—American Bakeries Co., let contract to R. H. Smallings Sons to erect plant; 50x250 ft.; 2 stories and basement; ornamental front pressed brick and stone; mill construction; cost \$35,000; Happ & Shelverton, Archts.

Ga., Savannah—Artificial Limbs—J. E. Hanger Artificial Limbs Co., Atlanta, Ga. reported to establish plant in Savannah.

La., Monroe—Sewing Machines—Singer Sewing Machine Co., 149 Broadway, New York, will construct plant in Madison parish.

La., Monroe—Carbon—Atlas Oil Co., will establish carbon mill and gasoline extraction plant; cost about \$250,000.

Md., Baltimore—Chemicals—The Argol Sulphite Co., said to be a Philadelphia concern, constructing plant at Curtis Avenue and Birch St., in Curtis Bay section; Whiting-Turner Construction Co., Stewart Bldg., contractors; steel and concrete building.

Md., Baltimore—Remedies—Vapor Appliances and Remedies Co., 1706 N. Charles St., capital \$200,000, inctd. by J. Harry Williams, Elmer S. Lambdin, Tom G. Hogen; mf. chemicals, drugs, oil, etc.

Md., Baltimore—Chemicals—Chemicals Products Co., 837 Equitable Bldg., capital \$10,000, inctd. by Edw. C. Hamilton, Byron R. Webb, Beth Gayle Hamilton.

Miss., Lexington—Bottling—Lexington Chero-Cola Bottling Co., capital \$10,000, inctd. by J. N. Hall, W. P. Lundy.

Mo., Granby—Shoes—Juvenile Shoe Corp. of Carthage, reported to establish branch plant.

Mo., St. Louis—Radio—Missouri Radio Corp., capital \$20,000, inceptd. by E. P. Guth, H. E. Murphy, G. B. Ross.

Mo., St. Louis—Radio—Artercraft Radio & Mfg. Co., capital \$25,000, inceptd. by O. R. Coblentz, M. H. Lyons, E. F. Scraper.

N. C., Wilmington—Toys—K. E. Stahl, reported interested in establishment of toy plant.

Okla., Oklahoma City—Remedies—Davis Remedies Co., capital \$50,000, inceptd. by Dr. A. B. C. Davis, M. J. Theimer, Clyde Davis.

Okla., Tulsa—Radio—Radio Shop, capital \$10,000, inceptd. by E. T. Kelley, Paul Wilson.

S. C., Batesburg—Bakery—J. G. Millon, Mgr. Twin City Bakery has plant, will install mixers, ovens, roll dividers, etc.

S. C., Charleston—Creamery—Newberry Creamery, capital \$10,000, inceptd. with C. T. Summers, Prest.; Dr. W. D. Senn, V.-P.; T. M. Neel, Secy.

S. C., Florence—Drugs—Florence Wholesale Drug Co., capital \$50,000, inceptd. with T. W. Jones, Prest.; Dr. Wade D. Craig V.-P.; W. J. Brown, Secy.

S. C., Greenville—Boll-We-Go—Boll-We-Go Mfg. Co., inceptd. with Homer L. Todd, Prest., establish plant to mfr. liquid preparation for extermination of boll weevil.

S. C., Sully—Bottling—New Coca-Cola Bottling Co., capital \$10,000, inceptd. with G. E. Bolen, Prest., J. W. Fogle, Secy.

Tenn., Lewisburg—Ice Cream—Lewisburg Ice Cream Co., capital \$40,000, inceptd. by W. H. Freeman, Louis Koeling, E. H. Smith.

Tenn., Memphis—Bakery—Piggly Wiggly Corp., Wm. Lazere, Mgr. will construct plant at 922-938 Union Ave.; 110x138 ft.; weekly capacity 100,000; cost \$50,000; Hanker & Cairns, Archt.

Tex., El Paso—Candy—El Paso Cactus Candy Co., 438 Durango St. will enlarge plant, increase capacity to 1000 lbs. daily.

Tex., Floydada—Drugs—Floydada Drug Co., capital \$18,000, inceptd. by H. W. O'Keefe, Wm. A. Donaldson, Porter Ragland.

Tex., Houston—Loft—Southern Loan & Investment Co. will erect loft building; 6 story; brick and concrete; 59x101 ft.; cost \$84,000.

Tex., Port Arthur—Drugs—Corner Drug Co., capital \$30,000, inceptd. by W. T. Hooker, G. S. Hooker and J. E. Myer.

Tex., Wichita Falls—Shoes—Katz Bros. Shoe Co., capital \$10,000, inceptd. by Jake & Fannie Katz, Lillie Ginsburg.

Va., Norton—Mattress—Norton Mattress & Mfg. Co., H. M. Dandy, Prest., increased capital to \$50,000.

W. Va., Huntington—Creamery—Wilson Creamery Co., capital \$50,000, inceptd. by H. T. Lovett, M. A. Simms, G. A. Koontz.

W. Va., Nitro—Chemicals—Carrier Chemical Co., lately noted inceptd., organized with M. T. Davis, Jr., Prest.; W. E. Connell, V.-P.; Arch Krelg, Secy.; establish plant to mfrs. finished chemicals from raw materials.

W. Va., Nitro—Paper—Charleston Paper Mfg. Co., Charleston, W. Va., Charles G. Hartje, Steubenville, O., Prest., purchased building and 9½ acres land, remodel; install \$208,000 mchy.; cost of plant \$400,000.

W. Va., Paden City—Cut Glass—Paden City Glass Mfg. Co., David Fisher, Prest., will construct plant, 80x110 ft.; W. H. Bowser Lumber Co., Contr., open mchy. proposals July 1st; increased capital to \$150,000.

W. Va., Warwood—Oxygen—Wheeling Oxygen Co. will construct plant.

Motor Cars, Garages, Tires, Etc.

Ala., Birmingham—Automobile—Mixon Automotive Corp., capital \$10,000, chartered by E. D. Mixon, J. W. Phelps and B. B. Lester.

Ark., Texarkana—Tire Protectors—Economy Tire Sales Co., organized by T. K. Falconer, Little Rock, Ark. and others, establish plant for mfr. of caterpillar chain tire protectors.

Fla., Tampa—Automobile Supplies, etc.—Bode-Schneider & Co., 912 Twiggs St. (lately noted inceptd. capital \$10,000) organized with S. Louis Bode, Secy.-Treas.; erect \$30,000 mill construction plant, blds open May 31; install metal stamping and compound mixing, radio equipment and supplies; blds until June 15. (See Mchy. Wanted Radio Supplies; Metal Stamping and Branding; Soap Making.)

Ga., Atlanta—Garage—Piedmont Laundry Co., 79 Trinity Ave. erect 1 story brick garage.

Ky., Louisville—Auto Supplies—Rivers Co. increased capital to \$11,000.

Ky., Louisville—Motors—Simms Spark Observer & Trouble Finder Co., inceptd. by Charles L. Kelley, Emmett Simms and Wallace R. Woods.

Ky., Louisville—Garage—Community Service Garage, capital \$50,000, inceptd. by William Dehler, George A. and Tony Landen-wich.

La., Shreveport—Garage—Southwestern Gas & Electric Co., erect 1-story garage at rear 1026 Edwards St., estimated cost \$12,908.

La., Monroe—Automobile Supplies—Monroe Auto Supply Co., will occupy bldg. on Walnut St.; property purchased and remodelled by Walnut Bldg. Corp.

Md., Baltimore—Automobiles—Commerce Motor Truck Co., 15 N. High St., capital \$50,000, inceptd. by R. Marvin Cooksey, J. Floyd Spurrier and J. Ethel Zepp.

Md., Baltimore—Service Station—George R. Callis, Jr., American Bldg., remodel bldg. for service station and erect 16x46.3-ft. shed at Pratt and Smallwood Sts.

Md., Baltimore—Garage—J. Irving Beal-mear, Fidelity Bldg., erect 1 story 70x75 ft. brick garage at 917 N. Fulton Ave.; estimated cost \$20,000.

Md., Baltimore—Automobile Repairing—William A. Butler Motor Co., 1703 W. Baltimore St., inceptd. by Wm. A. Butler, George H. Myers and George B. Loden.

Md., Baltimore—Motors—Motor Parts Corp., 1419 N. Charles St. increased capital to \$100,000.

Mo., Monett—Garage—E. E. Johnson 1st contract for erection of garage on Broadway; hollow tile and stucco construction, plate glass front.

Mo., Springfield—Batteries—Chain Battery System Manufacturers, capital \$25,000, inceptd. by J. B. and W. H. Murphy, Springfield; E. C. Nordyke, Carthage, Mo.

Mo., Springfield—Garage, etc.—Lloyd Auto Storage Co., inceptd. by O. E. Lloyd, A. M. Miller and Emery B. Moffett.

Okla., Tulsa—Service Station—Skiatook Service Co., capital \$100,000, C. H. Seger, R. B. Martin and Chas. Yancy.

S. C., Charleston—Automobile Supplies, etc.—C. D. Francke & Co., increased capital to \$610,000.

Tenn., Chattanooga—Automobile Accessories—Wood Hartline Auto Co., capital \$10,000, inceptd. by W. L. Wood, J. R. Hartline and C. A. Grimmer.

Tenn., Memphis—Automobiles—Buyers'

Service Co., inceptd. by A. L. Tate, Harry C. Johnson and W. P. Long.

Tenn., Memphis—Tires—Bartling Tire Co., inceptd. by Edward F. Bartling, E. L. Pickrell and R. G. Brown.

Tex., Camp Travis—Garage—Camp Travis Transportation Co., capital \$13,500, inceptd. by M. G. Strayer, O. H. Lachenmeyer and W. S. Scott.

Tex., Comfort—Filling Station—Comfort Drive-In Filling Station, inceptd. by C. C. Jones, Otto Ingenhuett and Otto Flach.

Tex., Dallas—Motors—Mack-International Motor Truck Corp., New York, established branch factory at 2421 Main St., later to erect plant, reported.

Tex., Kirbyville—Automobiles—Kirbyville Automobile Co. increased capital to \$40,000.

Tex., Kingsville—Garage, etc.—Gulf Coast Motor Co., let contract to Paul H. Hart to erect 100x140-ft. brick garage; \$16,000; has equipment. (Lately noted.)

Tex., San Antonio—Service Station—Standard Service Stations, capital \$10,000, O. I. Caruthers, C. K. Biggs and M. R. Wyatt.

Tex., Tyler—Garages—Smith, Marsh and Grimes Co., capital \$25,000, inceptd. by W. B. Marsh, C. S. Grimes and R. A. Smith.

Va., Richmond—Automobile Accessories—Virginia-Carolina Rubber Co., R. J. Bell, Mgr., 12 N. 19th St. let contract to E. L. Basser to erect brick and wood building, \$25,000; has equipment; Davis Bros., Archt.

W. Va., Fairmont—Filling Station—Dixie Co. plans erecting filling station, purchased site at East Park and Morgantown Ave.

W. Va., Pleasant Valley, P. O. Wheeling—Garage, etc.—National Garage, Ralph Brink-mier, erect 100x150-ft. building, \$50,000; purchased site.

Railway Shops, Terminals, Roundhouses, Etc.

Md., Baltimore—Western Maryland Ry. Co., Maxwell C. Byers, Prest., awarded contract to The M. A. Long Co., Munsey Bldg., for erection of modern locomotive repair shop, steel and concrete, 100x300-ft., suitable for installation of heavy duty traveling cranes; part of mchy. to be moved from Hagerstown. Md. shops, purchase balance; to be ready for operation in 90 days.

Road and Street Construction.

Ala., Anniston—State Highway Comsn., Montgomery, Ala., will construct State Highway from Camp McClellan through Piedmont to Georgia line; State and Federal Road.

Ala., Attalla—City, plans expending \$125,000 to pave 30 blocks; bituminous macadam, penetration method. Address The Mayor.

Ala., Birmingham—Jefferson County, For full detail see Mchy. Wanted—Road Construction.

Ala., Decatur—State Highway Dept., Montgomery, Ala., will surface treat road in Morgan County, between Albany and Hart-sells; gravel and macadam; low bidder, J. F. Morgan, Birmingham, at \$17,726.52, for oil and asphalt surfacing.

Ala., Dadeville—State Highway Dept., Montgomery, Ala., will construct 5½ mi. in Tallapoosa County, between Alexander City and Dadeville; gravel and macadam; low bidder, R. D. Chambers Constr. Co., West Point, Ga., at \$99,862.09, for bituminous macadam; \$60,981.66, for gravel; \$77,302.31, for chert.

Ala., Gadsden—City plans expending \$125,000 to \$150,000 to pave certain streets, including Forest Ave., Chestnut St., 4th, Tuscaloosa, Candler Ave., 15th, 3rd and Alabama Sts., 6th, Stocks, Randall, Gardner, 9th,

Spruce and Christopher Aves., etc. Address The Mayor.

Ark., Fort Smith—City Comsn., will pave S. 26th St.; Improvement Dist. No. 17.

Ark., Pine Bluff—City Comms., Paving Dist. No. 59, plans expending \$60,000, to pave 25 blocks in Hickory, Cypress, Plum and Cedar Sts.; Guest Engr. Co., Engr.

Ark., Pine Bluff—City Comms., Paving and Curb and Gutter Dist. No. 57, will pave 18 blocks on 14th Ave., Oak, Beech and 11th Sts.; until May 26; Fred. Bennett, Engr., 410 Citizens Bank Bldg.

Ark., Searcy—Board of Comms., Street Improvement Dist. No. 1, let contract to Grady Garms, Little Rock, Ark., at \$27,000, to improve about 15 blocks streets; 17,400 sq. yds.; curb and gutter and construct gravel surface; T. A. Van Amburgh, Dist. Engr.

Fla., Tavares—Lake County Comms., H. R. Ferran, Chrmn., will construct 65 mi. roads and bridges in South Lake Road and Bridge Dist.; voted \$250,000 bonds; Geo. E. Heller, County Engr.

Ark., Newport—Chamber of Commerce. For full details see Mch. Wanted—Paving.

Fla., Clearwater—Pinellas County Comms., will widen 3 main trunk highways; bids until June 14; County Engr., Burleson. (Latest noted bids until May 2.)

Fla., Miami—Dade County Comms., plan extending Miami Canal road to County line; Beach road to County line; widen Tamiami Trail from LeJeune road to edge of Everglades; Mainland-Key Largo road; vote June 20 on \$1,000,000 bonds.

Fla., Mount Dora—Town. For full detail see Mch. Wanted—Paving.

Fla., Pensacola—Escambia County Comms., will construct 3 roads. For full details see Mch. Wanted—Road Construction.

Fla., Quincy—For full detail see Water-Works.

Fla., St. Petersburg—City, E. C. Garvin, Director Public Works, let contract to Georgia Engr. Co., Augusta, Ga., at \$306,652.85, to pave 43,840 ft. with vitrified brick.

Fla., St. Petersburg—City, E. C. Garvin, Director Public Works, let contract to Georgia Engineering Co., Augusta, Ga., at \$306,700, to construct 127,000 sq. yds. street paving; brick on sand foundation with sand and with asphalt filler; J. B. Parsons, Engr.

Fla., Tampa—City, Chas. H. Brown, Mayor, will grade and pave Palmetto Ave., Dekle Ave. and 3rd Ave.; all 26-ft. wide; 2½-in. asphalt blocks; concrete curb; bids opened.

Fla., West Palm Beach—Palm Beach County plans constructing road district extending 30 mi. from Swinton Ave., in Delray, to Everglades.

Fla., West Palm Beach—Palm Beach County, will improve Jupiter Island road, cost \$12,560; Dixie Highway to Port Salerno, cost \$20,000; construct new road to cross St. Lucie canal, cost \$25,000; Jupiter road toward Okeechobee City, cost \$36,000; build bridges; vote June 15 on \$150,000 bonds.

Fla., West Palm Beach—Palm Beach County will improve 4 roads and build bridge in Stuart-Palm City Dist.; voted \$250,000 bonds; also construct 3 short roads and build bridge over Jupiter River, near lighthouse; in Jupiter Dist., voted \$80,000 bonds. Address County Comms.

Ga., Forsyth—City, Jas. A. Tribble, Mayor, will construct 6 mi. sidewalks and 15,000 sq. yds. streets; voted \$75,000 bonds; J. B. McCrary Engineering Co., Engr., Atlanta, Ga. (See Machinery Wanted—Paving Materials; Paving Equipment.)

Ga., Savannah—City, C. V. Hernandez, Assistant Clerk, plans paving Tattnall St.

from Berrean to Taylor Sts.; and Floyd St. from Ogleshorpe Ave. to Liberty Sts.

Ky., Georgetown—City, Z. L. Myers, Mayor. For full detail see Mch. Wanted—Paving.

La., Alexandria—State Highway Comsn., Baton Rouge, La., let contract to Grant Parish Construction Co., Colfax, La., at \$159,546.21, to construct 27.1 mi. Alexandria-Columbia Highway; gravel surface; J. M. Fourmy, State Highway Engr.

La., Baton Rouge—East Baton Rouge Parish Police Jury. For full details see Mch. Wanted—Road Construction.

La., Benton—Louisiana Highway Comsn. For full detail see Mch. Wanted—Road Construction.

Md., Baltimore—City, Dep't. Public Improvements, plans widening Charles Street Ave. Boulevard from beyond University Parkway to new city limits; Reisterstown Road from new city line to old city line; 40-ft. paved roadway with 20-ft. pavements from old city line to Hayward Ave. and beyond, 30-ft. roadway with 22-ft. pavement; Philadelphia Road from Monument to Fayette St.; beyond Monument St. to be boulevard.

Md., Baltimore—City will construct parked boulevard between Clifton and Herring Run Parks; Park Road to pay for parking and curbing; city to build road and pave roadways and footways; Wm. F. Broening, Mayor.

Md., Baltimore—City, Board of Awards, Wm. F. Broening, Pres., let contract to Wm. G. Suero, at \$87,000, to gravel and otherwise improve roads.

Md., Baltimore—State Roads Comsn., 601 Garrett Bldg., expend \$1,000,000 for Baltimore-Southern Maryland truck line highway route; 33 mi. from Benfield, on Annapolis Boulevard, to Upper Marlboro; first section 8 mi. to be started soon.

Md., Baltimore—City, R. Keith Compton, Chrmn., Paving Comsn., let contract to Geo. Long Contracting Co., 1st Ave. and 12th St., at \$33,172.40, to pave Davis St., from Bath to Franklin; Guilford Ave., from Bath to Franklin; Franklin St. from Calvert to Guilford; and Guilford Ave. from Center to Franklin; granite block; to American Paving & Contracting Co., Montebello, Balto., at \$42,432.25, to pave Albemarle St., from Eastern Ave. to Baltimore St.; Constitution and Groves Sts. from Monument to Madison; Stiles from East Falls Ave. to Exeter St., and from Lloyd St. to Central Ave.; sheet asphalt; to P. Flanagan & Co., 2600 Harford Road, at \$28,547, to pave Bouldin St. from alley north Philadelphia Road to Monument St.; Clinton St., from Philadelphia Road to Monument St.; Jefferson, St. from Bouldin St. to Highland Ave.; and McElderry St. from alley west of Highland Ave. to Highland Ave.; will pave 13 blocks Tiffany St., 2 blocks each Cedar and Ellicott Sts.; etc.

Md., Baltimore—City, Board of Awards, Wm. F. Broening, Pres., will construct 21,000 sq. yds. cement concrete paving in alleys in Contracts Nos. 81, 82 and 83; cost \$35,240; let contract for Contracts Nos. 81 and 82 to Arundel Construction Co., 23 Knickerbocker Bldg.; for Contract No. 83 to Dominic Catalano, 256 East St.; A. E. Christliff, Highways Engr.; J. Wilson Richardson, Engr. in charge.

Md., Easton—Town. For full details see Mch. Wanted—Curb and Gutters Construction.

Md., Elkton—Cecil County Comms., will improve roads and highways in County; sell \$50,000 bonds.

Md., Elkton—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md., will take over following roads in Cecil County: Rising Sun-Cathers Corner; West Nottingham; Rising Sun-Farmington; Perryville-Aiken;

North East-Leslie, and Barksdale roads; expend \$24,900 to repair.

Maryland—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md., construct 15-ft. wide concrete roads in following:

Baltimore County, 1.4 mi. State Highway from end Cont. No. B-45, to Mt. Carmel; Cont. No. B-48; low bidder, Thomas Mullen, at \$43,559.

Montgomery County, 1.56 mi. State Highway from end of Cont. No. M-27 to Coleville; Cont. No. M-28; low bidder, Ward & O'Connell, at \$35,543.

Kent County, 4.81 mi. State Highway from end of Cont. No. K-16 to Millington; Cont. No. K-17; low bidder, Kauffman Construction Co., at \$99,540.

Wicomico County, 3 mi. State Highway from Salisbury to Delmar; Cont. No. W-19; low bidder, A. B. Sandidge & Co., at \$62,380.

Maryland—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md., will construct 4 roads. For full detail see Mch. Wanted—Road Construction.

Miss., Collins—Covington County Board of Supvrs. plans completing Dixie Highway through county; Federal Aid available.

Miss., Natchez—Adams County, Board of Supvrs. For full details see Mch. Wanted—Road Construction.

Miss., Macon—Noxubee County Comms., Dist. No. 1. For full detail see Mch. Wanted—Road Construction.

Miss., Philadelphia—Neshoba County. For full detail see Mch. Wanted—Road Construction.

Mo., Boonville—State Highway Dept., Jefferson City, Mo., for full details (See Mch. Wanted—Road Construction.)

Mo., Butler—State Highway Dept., Jefferson City, Mo., let contract to C. F. Fogle, Jefferson City, at \$15,259.36, to construct 5.142 mi. State road from Butler eastward and westward; grade and construct drainage structures; Bates County, State Aid Project No. 20,151; S. M. Rudder, Div. Engr., Igenfritz Bldg., Sedalia, Mo.

Mo., Carrollton—State Highway Comsn., Jefferson City, Mo., plans expending \$38,910, to grade State Highway from Norborne toward Hardin and also road toward DeWitt.

Mo., Columbia—City will pave Park Ave. with Kentucky rock asphalt, 1½-in. thick; 24-ft. between curbs; concrete combined and gutter. Address The Mayor.

Mo., Columbia—City plans paving Paris Road, Melbourne and S. 5th Sts. with Kentucky rock asphalt; plans letting contract soon. Address The Mayor.

Mo., Eminence—State Highway Dept., Jefferson City, Mo., let contract to M. E. Gillioz, Monetta, Mo., at \$25,797.11, to construct 4.261 mi. State road from Eminence south; Shannon County, State Aid Project No. 20,160; M. S. Murray, Div. Engr., Sikes-ton, Mo.

Mo., Fulton—State Highway Dept., Jefferson City, Mo., for full detail see Machinery Wanted—Road Construction.

Mo., Huntsville—State Highway Dept., Jefferson City, Mo., let contract to Lynch-McDonald Construction Co., Moberly, Mo., at \$56,440.92 to construct 1.549 mi. State road from Moberly to Huntsville; grade and construct drainage structures; vitrified brick pavement on concrete base course, bituminous filler; 18-ft. wide; Randolph County, Federal Aid Project No. 186; S. M. Rudder, Div. Engr., Igenfritz Bldg., Sedalia, Mo.

Mo., Iron-ton—State Highway Dept., Jefferson City, Mo., for full detail see Mch. Wanted—Road Construction.

Mo., Kansas City—City plans paving Linwood Boulevard from Indiana to Poplar Ave.;

30-ft. roadway with 2½-gt. concrete gutters on each side. Address The Mayor.

Mo., Kansas City—Park Board, plans grading Mall drive in Swope Park; 60-ft. wide roadway from east of Swope parkway to Zoo; two 20-ft. paths; \$300,000 available; invites bids.

Mo., Kansas City—City, Board of Public Works, plans grading Harrison St.; construct concrete gutter on 58th St.; curb on Michigan and Indiana Aves.; sidewalks on 58th St. and on Park Ave.; let contracts for paving 75th St.

Mo., Kirksville—State Highway Dept., Jefferson City, Mo., for full details (See Mch. Wanted—Road Construction.)

Mo., Marshfield—State Highway Dept., Jefferson City, Mo., for full details (See Mch. Wanted—Road Construction.)

Mo., Monticello—State Highway Dept., Jefferson City, Mo., for full details (See Mch. Wanted—Road Construction.)

Mo., Monticello—State Highway Dept., Jefferson City, Mo. let contract to C. P. O'Reilly & Co., St. Louis, Mo., at \$221,000 for following:

8.37 mi. State road from Canton, southward and westward.

7.94 mi. State road northward and southward through LaGrange Special Road Dist.; M. J. Hanick, Div. Engr., Howe Bldg., Macon, Mo.

Mo., New London—State Highway Dept., Jefferson City, Mo., for full details (See Mch. Wanted—Road Construction.)

Mo., Oregon—State Highway Dept., Jefferson City, Mo., let contract to Allison & Dillingham, St. Joseph, Mo., at \$29,757.66, to construct State road eastward, westward, southward and northward through Holt County; grade and construct drainage structures; Holt County, State Aid Project No. 2037; A. C. Lingley, Div. Engr., Ballinger Bldg., St. Joseph, Mo.

Mo., St. Charles—City, for full details see Mch. Wanted—Paving.

Mo., St. Louis—City, for full detail see Mch. Wanted—Paving.

Mo., St. Joseph—City, Board of Public Works, plans paving 22nd St. from Duncan St. to Garfield Ave.; Portland cement concrete.

Mo., St. Louis—City, Board of Public Service, plans constructing 23½-mi. street and 11 mi. alley paving, including reconstruction of Vernon Ave. from Union to Goodfellow, cost \$35,000; bids opened May 23; connect by 4 main highways, Carondelet Dist. and S. St. Louis with southwestern part of city; rebuild Delor, Meramec and Bates Sts. west from Grand Ave. to Gravois Road; Loughbrough Ave. from Colorado Ave. west to Gravois road; about \$2,000,000 available.

Mo., Trenton—City, C. R. Winks, will pave 13th St. with concrete; invites bids.

Mo., Tusculum—State Highway Dept., Jefferson City, Mo., let contract to Felix Kersting, Jefferson City, Mo. at \$14,709.88 to construct 2.389 mi. State road from Tusculum to Pulaski County line; grade and construct drainage structures; Miller County, State Aid Project No. 20156; S. M. Rudder, Div. Engr., Ilgenfritz Bldg., Sedalia, Mo.

Mo., Westplains—State Highway Dept., Jefferson City, Mo., plans improving road in upper end of Howell County; H. P. Mobberly, Div. Engr., Springfield, Mo.

North Carolina—North Carolina State Highway Comsn., will construct 15 roads. For full detail see Mch. Wanted—Road Construction.

North Carolina—State Highway Comsn.,

Raleigh, N. C., let contract to C. B. Hester, Greensboro, N. C., at \$19,339.80 to construct 9.28 mi. top soil road from Taylorsville to Iredell County line.

N. C., Bessemer—City let contract to Davis-Wilcox Construction Co., at \$85,000 to pave several streets; 27,700 sq. yds. plain concrete, reinforced concrete, or sheet asphalt, etc.; Mees & Mees, Const. Engrs., Charlotte, N. C.; R. C. Kennedy, Mayor.

N. C., Danbury—State Highway Comsn., Raleigh, N. C., will construct State Highway in Stokes County from Danbury to Westfield, through Moore's Springs.

N. C., Elkin—Town Comms., let contract to Campbell Construction Co., Columbus, Ga., to macadamize streets and sidewalks; J. W. Ring, Mayor; Pegram & Reynolds, Const. Engrs., 501 Wachovia Bank Bldg., Winston-Salem, N. C.

N. C., Marion—McDowell County Highway Comsn., Hugh F. Little, Chrmn., let contract to Padgett-Justice Co., Rutherfordton, N. C., at \$20,000, to grade and drain 5.5 mi. County Highway; J. L. Martin, County Engr., Marion.

N. C., Wilmington—City, will construct cement walks in Pembroke Jones Park, on Market St. Address The Mayor.

Okla., Ada—City Comsn., plans paving 8 blocks on Townsend Ave.; bids opened after June 1.

Okla., Madill—Marshall County Comms., Earl E. Ayres, Clk., will construct 65 mi. hard surface roads in County; cost \$700,000; Federal Aid to furnish \$350,000; vote June 12 on \$350,000 bonds; bids opened; L. Varner Stinson, County Engr., Durant, Okla.

Okla., McAlester—Pittsburg County plans expending \$400,000 to hard-surface highways in county. Address County Comms.

Okla., Norman—State Bd. of Pub. Affairs, H. V. Bird, Secy., will pave oval at State University; 4500 sq. yds.; bids opened May 18.

Okla., Wilburton—Lattimer County will pave Postal Highway from Lattimer County line near Hartshorne through Wilburton and Red Oak to near Wister; voted \$250,000 bonds. Address County Comms.

S. C., Abbeville County Highway Comsn., L. W. Keller, Secy., will construct 7.66 mi. top soil road from Abbeville to Greenwood County line, near Douglas Mill; contract let to Henry N. Garrison, Easley, S. C., at \$17,357.81.

S. C., Bamberg—State Highway Dept., Columbia, S. C., let contract to G. Frank Bamberg, at \$39,057.33, to construct 12.453 mi. sand clay surface road from point near Edisto River, about 2 mi. from Branchville to Bamberg, including concrete culverts.

S. C., Charleston—Charleston County Sanitary and Drainage Comsn., will construct 4 mi. concrete highway to John's Island crossing in St. Andrew's Parish; 29,360 yds. plain concrete surfacing; 6874 yds. reinforced concrete; 28-ft. bridge and 2 double culverts; lowest bidder, J. M. Gregory & Co., Newton, N. C., at \$116,591.29.

S. C., Newberry—State Highway Dept., Columbia, S. C., let contract to construct 2.515 mi. road from Chappels to point near Saluda River bridges, on Newberry-Greenwood road.

S. C., Orangeburg—Orangeburg County Comms., let contract to Thomas E. Hook, New Brookland, S. C., at \$36,225.11 to construct 16 mi. sand clay road from Orangeburg to Neeses.

S. C., Orangeburg—City, Improvement Comsn., T. O. S. Dibble, City Clk., let contract to Ely Construction Co., Augusta, Ga., to construct about 5 mi. street paving; \$234,470,

for paving of sheet asphalt; \$217,730, for paving of asphaltic concrete; Edw. Hawes, City Engr.; Tomlinson Engineering Co., Const. Engrs., Columbia, S. C.

S. C., Sumter—Sumter County Permanent Road Comsn., will improve 4 roads. For full details See Mch. Wanted—Road Construction.

Tenn., Chattanooga—City Comsn., constructing sidewalks on following:

National Ave. from McCallie to Bailey Ave., Bennett Ave., 12th, 13th and 14th Sts. from Orchard Knob to Lyerly; 12th St. from Watkins to Dodds; Kirby Ave. from Lyerly to Dodds; Beech St. from Main to Anderson; east side Orchard Knob Ave. from Main to Anderson; 16th and 17th Sts. from Dodds to Ringgold road; Bennett Ave., 12th and 13th Sts. from Dodds to Kyle; 14th St. from Dodds to Blackley; Woodward St. from Union to Anderson; Lewis St. from Kirby to Anderson; Spruce, between Duncan and Chamberlain; Read Ave. from 22nd to Missionary.

Tenn., Elizabethtown—Carter County Blue Spring Road Comms. For full detail see Mch. Wanted—Road Construction.

Tenn., Lenoir City—City, for full details (See Mch. Wanted—Paving.)

Tenn., Nashville—City, Felix Z. Wilson, Mayor, let contract to Rodes-Eller Construction Co., at \$43,182, to pave Charlotte Ave. with Mexican petroleum asphalt; Wm. A. Southgate, City Engr.

Tenn., Newport—State Highway Comsn., Nashville, Tenn., plans constructing Dixie Highway in Cocke County; let contract about July 1.

Tenn., Woodbury—State Highway Dept., Nashville, Tenn. For full detail see Mch. Wanted—Road Construction.

Tenn., Union City—City, for full detail see Mch. Wanted—Paving.

Tex., Austin—Travis County, New Sweden Road Dist. plans expending \$75,000 to construct 20-mi. highway through district, including concrete drainage and bridge structures. Address County Comms.

Tex., Ballinger—Runnels County Comms. Court. For full detail see Mch. Wanted—Road Construction.

Tex., Beaumont—Jefferson County, J. B. Peck, County Judge, plans constructing 20 mi. highway from Port Arthur to Orange; 12-ft. wide shell surface; cost for Jefferson County, \$30,000. M. J. Graham, Engr.

Tex., Brownsville—Cameron County plans constructing 125 mi. hard-surface road from Brownsville to Laredo. Address County Comms.

Tex., Cleburne—Johnson County, J. B. Haynes, County Judge, will construct 20-mi. hard surface road in Johnson County; vote June 24 on \$225,000 bonds.

Tex., Coleman—Coleman County plans constructing 10.57 mi. State Highway No. 7, in Coleman County; gravel surface; cost \$86,000; also 17.7 mi. State Highway No. 7; gravel surface, steel and concrete bridges; cost \$231,232; L. G. Matthews, County Judge, W. E. Dickerson, County Engr.

Tex., Corpus Christi—Nueces County plans constructing 90 mi. beach drive from city to Point Isabel. Address County Comms.

Tex., Eastland—State Highway Dept., approved plans to construct 10.4 mi. State Highway No. 1, Eastland County; 19-ft. brick pavement; cost \$353,318.08; C. R. Starnes, County Judge; W. R. Eccles, County Engr.

Tex., El Paso—City will pave Park St., from 8th to 10th.; W. C. Stewart, City Engr. Address The Mayor.

Tex., Fort Worth—Tarrant County plans

building bridge over Trinity River, on State Highway No. 10; cost \$42,000; Hugh L. Small, County Judge; R. V. Glenn, Const. Engr.

Tex., Fort Worth—Tarrant County, plans constructing 7.51 mi. 18-ft. gravel road on Granbury Road, State Highway No. 10, from Benbrook to County line; cost \$109,570; H. L. Small, County Judge; R. V. Glenn, County Engr.

Tex., Hillsboro—Hill County let contract to Uvalde Road Asphalt Co., Swearingen Bldg., San Antonio, Tex., at \$79,891.76, to construct 9.91 mi. State Highway No. 2-A; State Aid Project No. 122; 87,218 sq. yds. 1-in. cold rolled limestone rock asphalt surfacing; and at \$54,159.40 to construct 5.8 mi. Colorado to Gulf Highway; State Aid Project No. 114; 5900 sq. yds. 1-in. cold rolled limestone rock asphalt pavement, and 71,000 lin. ft. 6 and 8-in. curbing; to S. E. Finley, Atlanta, Ga., and Hannah Construction Co., Box 994, Waco, Tex., at \$40,000, to construct 7.15 mi. King of Trails, north, State Highway No. 6; Federal Aid Project No. 113, Sec. 2-A; 67,137.4 sq. yds. 1½-in. inverted penetration asphalt pavement; W. L. Wray, County Judge; T. H. Webb, Engr.

Tex., Houston—Harris County Commrs. Court, H. L. Washburn, County Auditor, plans resurfacing Galveston road from Ellington field to Webster; Precinct No. 1; Howe & Wise, County Engrs., First National Bank Bldg.

Tex., Houston—City, O. F. Holcombe, Mayor, let contract to Gulf Bitulithic Co., at \$16,435, to pave Rusk Ave., from Austin to Crawford Sts., and to resurface McKinney Ave., from Velasco to York Sts.; J. C. McVea, City Engr.

Tex., Houston—City, O. F. Holcombe, Mayor, plans widening and paving Houston Ave.; J. C. McVea, City Engr.

Tex., Karnes City—Karnes County, Road Dist. No. 4, will construct 14.54 mi. 1-in. bituminous surface on gravel and caliche base; 1460 sq. yds. pavement; 1400 cu. yds. concrete, etc.; cost \$325,000; O. N. Powell, Engr., Kenedy, Tex.

Tex., Johnson City—Blanco County, Road Dist. Nos. 1 and 2, let contract to Holt and Ruby, Blanco, Tex., at \$75,000, to grade 14 mi. highway No. 46; build concrete bridges; Wm. Martiny, County Judge, Johnson City; W. C. Yeager, County Engr., Blanco. (See Mch. Wanted—Paving Materials.)

Tex., Johnson City—Blanco County Commrs. Court, Wm. Martiny, County Judge, will improve roads in Road Dist. No. 2; vote June 17 on \$40,000 bonds.

Tex., Laredo—Webb County plans constructing highway from Laredo to Mirando City oil field; voted \$150,000 bonds. Address County Commrs.

Tex., Lufkin—U. S. Bureau of Public Roads, Washington, D. C., approved plans to construct 15 mi. State Highway No. 35, from Lufkin, to Clarkes Ferry and Neches River; Angellina County, Federal Aid Project No. 271; 16-ft. gravel; cost \$225,000; John F. Robinson, County Judge; G. R. Abney, County Engineer.

Tex., Marlin—Falls County, E. M. Dodson, County Judge, will construct roads; votes May 20, on \$50,000 bonds; G. W. Courter, County Engr.

Tex., McKinney—State Highway Dept., approved plans to construct 2.2 mi. State Highway No. 1, Collin County; bituminous macadam; cost \$65,500; O. T. Murray, County Judge; F. W. Cawthorn, County Engr.

Tex., Orange—Orange County plans constructing concrete highways through city, including Greene Ave. from 15th St. to Sabine River. Address County Engr.

Tex., Richmond—Fort Bend County, Road Dist. No. 4, will construct roads; votes May 24 on \$125,000 bonds; C. D. Meyers, County Judge; Nagle-Witt-Rollins Engr. Co., Engr., Dallas, Tex.

Tex., San Angelo—City Comsn., let contract to O'Connor & Smith, Dallas, Tex., at \$150,000 to pave 3.6 mi. residence streets; inverted penetration on base of gravel, or crushed rock or combination of both; R. H. Henderson, City Mgr.

Tex., Sequin—Guadalupe County, Road Dist. No. 5, will grade and gravel 3.7 mi., and hard surface 19.1 mi. in County; cost \$120,000; Hess & Skinner, Engrs., Dallas, Tex., for 3.7 mi.; J. B. Williams, County Judge.

Tex., Sonora—U. S. Bureau of Pub. Roads, Washington, D. C., approved plans to construct 9.6 mi. State Highway No. 4; Sutton County, Federal Aid Project No. 272; 16-ft. gravel; cost \$96,765; L. E. Elliott, County Judge; J. W. Alger, County Engr.

Virginia—State Highway Comsn., Richmond, Va., will construct following roads:

Between New Market and Roanoke, \$560,000.

Between Roanoke and Bristol, \$560,000.

Va., Alexandria—Arlington County will construct 3 mi. macadam road from western boundary of city to Donaldson's store. Address County Commrs.

Va., Suffolk—City will pave Brewer and Broad Sts.; extend Factory St.; later pave Washington St. from Broad to city limits. Address The Mayor.

W. Va., Benwood—City plans expending \$50,000 to construct street paving; contemplates paving Marshall St. from 9th to Benwood Subway; Wheeling Traction Co. will share expense. Address The Mayor.

Va., Lynchburg—City, B. A. Bennett, Director Public Works, will construct brick, concrete and bituminous macadam paving; \$200,000 available; construction by city. (See Mch. Wanted—Street Paving Materials.)

Va., Norfolk—Norfolk County Roads and Bridges Comsn., plans constructing highway from Great Bridge to North Carolina line; Route No. 27.

Va., Norfolk—Norfolk County, Roads and Bridges Comsn., will improve Swamp Road; construct Atlantic Ave., from Virginia Ry. crossing to Edmonds' corner; macadam surface; construct permanent surface on Swamp Road from Edmonds' corner to Intersection of Great Bridge Boulevard at Oak Grove Church; concrete; plans issuing \$110,000 bonds.

Va., Richmond—City, Allen J. Saville, Director Public Works, plans widening 12th St. and Davis Ave.

W. Va., Charleston—City, Lou Barringer, Mgr., let contracts to pave 40,000 sq. yds. streets; asphaltic concrete surface; Ernest Bruce, City Engr.

West Virginia—State Road Commission, Charleston, W. Va., will construct 36 roads. For full details See Mch. Wanted—Road Construction.

W. Va., Barboursville—Town, T. W. Peyton, Mayor, plans expending about \$22,000 to pave with macadam and tarvia following streets: Water from the mill to McClung McClung from Water to Shaw; Shaw, from McClung to Center; Center from Shaw to county paving.

W. Va., Fairmont—City, For full detail see Machinery Wanted—Paving.

W. Va., Huntington—City, Mat Miser Commr. Streets and Sewers, will pave 26th St. and Hall St., from 8th Ave. to Jarrett St.; let contracts for following: To Duncan & Griffith, for paving 12th Ave., and Monroe

Ave. from 14th to 18th Sts., 22nd and 3rd Sts., and South Boulevard; to L. J. Gillespie, to pave Monroe Ave. from 9th to 13th Sts.

W. Va., Princeton—State Road Comsn., Charleston, W. Va., let contract to John E. Dougher & Sons, Ellison, W. Va., at \$29,000, to construct 1 mi. road; penetration macadam; S. E. Bradley, Engr., Huntington, W. Va.

Sewer Construction.

Ark., Carlisle—City contemplates establishing sewer system. Address The Mayor.

D. C., Washington—For Full details See Mch. Wanted—Sewer Construction.

D. C., Washington—For full details see Water Works.

Fla., Jacksonville—For full details See Machinery Wanted Sewer Construction.

Fla., Quincy—For full detail see Water Works.

Fla., Miami—City, C. W. Murray, Engr., will construct sewer system, Projects 41 to 58, including about 96,864 ft. of 6 to 15-in. vitrified pipe, 4000 ft. cast iron outfalls, two 2,700,000 gal. screen disposal units. (Lately noted.)

Ga., Tifton—For full detail see Electric Plants.

Ga., Atlanta—City, Clark Donaldson, Engr. of Sewers, let contract for following sewer work: at \$126,000 to Wood-Rucker Constr. Co., for Orne St. sewer; at \$85,000 to J. B. McCrary Constr. Co., for Highland Ave. sewer; at \$16,485, to McDougald Constr. Co., for sanitary outfall sewer in Los Angeles Ave.; \$23,106 to Meadow Constr. Co., to extend Whitehall St. trunk sewer from Donnelly Ave. to Holderness St.; will open bids soon to construct 7 mi. of lateral sewers; also approved construction of various other lateral sewers.

Ky., Louisville—Sewer Comsn., let contract at about \$25,000, to Charles F. Smith, Dayton, O., to construct Section E of Middlefork Branch Project in Cherokee Park.

Ky., Paducah—City, Henry A. Pulliam, Commr. of Public Works and City Engr., will construct sewer system; 12" to 8'-6" diam. concrete vitrified clay pipe clay segment pipe and cast iron pipe, cost \$600,000, bids opened May 31; plans sewer system mains and laterals, cost \$800,000, not to be started within year.

Md., Baltimore—For full detail see Mch. Wanted—Sewer Construction Materials.

Md., Baltimore—Board of Awards let contract at \$28,804.50 to Ryan Construction Co., Phila., Pa., for building storm water drains in Northwestern section.

Md., Baltimore—Board of Estimates approved specifications for extending sanitary sewerage system to Govans, Irvington, and Hampden sections; 27 mi. sewers together with house connections, bids in two weeks.

Mo., Kansas City—City will construct district sewer to drain Swope Park and district north of Park; Paul A. Hartung, Engr., in charge of Sewer Division.

Mo., Maplewood—For full details see Mch. Wanted—Sewer Construction.

Mo., Washington—City let contract to Bihr Bros., construct storm sewer on Oak St. N. C., Lexington—For full details (See Mch. Wanted—Sewer Construction).

N. C., Mt. Airy—City, F. M. Moore, Clerk, construct sewer system; issue \$60,000 bonds.

Okla., Chickasha—For full details see Machinery Wanted—Sewer Construction.

Okla., Perry—City, A. R. Johnson, Mayor, will call for new bids for district sewer extension, 8-10-12-in. vitrified pipe, cost about \$40,000; Black & Veatch, Kansas City, Mo., Engr. in charge. (Supercedes previous items.)

Okla., Shattuck—City will construct sewer system; H. G. Olmstead & Co., 415 Oil Exchange Bldg., Oklahoma City, Okla.

N. C., Elkin—For full details see Water Works.

Okla., Muskogee—City let contract at \$8000 to H. B. Nelson & Son, to construct sewer from hospital site on Honor Heights to 40th St.

Tenn., Lenoir City—For full details (See Mch. Wanted—Sewer Construction.)

Tex., Center—For full details see Water Works.

Tex., Houston—City, O. F. Holcomb, Mayor, will construct sanitary sewers; voted \$250,000 bonds. (Lately noted.)

Tex., Van Alstyne—For full details see Mch. Wanted—Sewer Construction.

Va., Ashland—For full details see Water Works.

Va., Petersburg—For full details see Land Development.

Va., Richmond—City, Allen J. Saville, Director of Public Works, let contract for the following work: Main St. to Kelly & McLain, Franklin and Ninth Sts., A. J. Boyle, Baltimore, Md., Grace St. to Wingo and Deaner; terra cotta segment blocks; cost about \$100,000.

W. Va., Huntington—For full details see Machinery Wanted—Sewer Construction.

W. Va., Huntington—City let contract to Lucian Bias to construct lateral sewer in alley between 31st and 32nd Sts.

Telephone Systems.

Ky., Paducah—J. A. Rudy & Sons, let contract for installation of radio broadcasting station, radius 500 miles.

Okla., Carnegie—Prairie Lone Rural Telephone Co., inctpd. by R. F. Helvy, S. B. Powers and M. L. Merritt.

Textile Mills.

Md., Amelle, P. O. Cresapton—Silk—Chamber of Commerce and Dr. Camille Dreyfus of American Cellulose & Chemical Co., Ltd., New York interested in silk mfg. plant.

Mo., St. Louis—Shoe Laces—Hebeler Braid Co., Henry Hebeler, Prest., 616 United Home Bldg.; establish shoe lace plant.

N. C., Cherryville—Carl Rudisill interested in construction of textile mill.

N. C., Greensboro—Cotton—Latham Cotton Co., capital \$500,000, inctpd. by John L. Latham, Thomas E. Latham.

N. C., Greensboro—Cotton—Bradshaw-Roberson Cotton Co., capital \$1,000,000, inctpd. by C. W. Bradshaw, Geo. P. Robertson.

N. C., High Point—Mattress—Materials High Point Mfg. Co., D. E. Harlee, Prest.; establish plant to mfr. mattress materials.

N. C., Kannapolis—Cannon Mfg. Co., let contract to Goode Construction Co., Charlotte, for 3 story mill building.

N. C., Monbo—Yarn—Superior Yarn Mills, Inc., will improve plant; install mch.

N. C., Northwikesboro—Sweaters—P. J. Braeme will enlarge plant, install additional mch.

N. C., Ramseur—Columbia Mfg. Co., will improve building, install 200 looms, generator, etc.

N. C., Shelby—Cotton—Carl Rudisill of Cherryville, Graham Dellinger of Shelby interest in establishing cotton mill.

S. C., Greenville—Duncan Mills, construct additional building; J. E. Sirrine & Co., Greenville, S. C., Architects and Engrs.

Va., Cedar Bluff—Climch Valley Blanket Mill will rebuild plant recently burned; brick

and concrete; 45x100 ft.; 2 story; hydro electric power.

Water Works.

Ala., Jackson—City will install water works system; cost \$25,000. Address The Mayor.

Ark., Carlisle—City contemplates establishing water works system. Address the Mayor.

D. C., Washington—Washington Suburban Sanitary Commission, Evans Bldg., New York Ave., will construct water and sewer system, bids until June 7; Robert B. Morse, Ch. Engr. of Dist., Hyattsville, Md. (See Mch. Wanted—Sewer and Water Pipe.)

Fla., Quincy—City will extend and repair water and sewer mains, voted \$18,000 bonds; improve electric light and water plant, voted \$40,000 bonds; street paving, voted \$40,000 bonds; J. P. Smith, Clk.

Fla., Tampa—Temple Terraces, Inc., V. W. Helm, Secy., 801 Citrus Exchange Bldg., will expend about \$15,000 for construction of water plant in connection with land development; erect 50,000 gal. tank, 75 ft. steel tower and pumping system, 300,000 gal. per day of 24 hrs., centrifugal pump to be installed at spring with capacity of approximately 200,000 gal. per minute, install new tower, tank and pump, second-hand pipes, pump direct from spring to tank, about 180 ft.; receiving proposals for mch. (See Machinery Wanted—Water Pipe-Tower-Rollers.)

Ga., LaGrange—City will remodel, repair and extend water works; votes June 1 on \$25,000 bonds; J. A. Avary, Mayor.

Ga., Tifton—For full details see Electric Plants.

Md., Baltimore—City purchased plant and water mains of Brooklyn-Curtis Bay Water Co., Wm. A. Megraw, Water Engr.

Miss., Jackson—City will improve water works; vote June 3 on \$10,000 bonds; J. Hunter Taylor, Election Commr.

Mo., California—City will extend water works; votes June 6 on \$60,000 bonds. Address The Mayor.

Mo., Vandalia—City will construct reservoir with capacity of 100,000 gal. Address Chamber of Commerce.

Mo., Walnut Grove—For full details see Electric Plants.

N. C., Asheville—R. J. Sherrill, Commrs. of Public Works contemplates repairing reservoir on Beaucatcher mountain; Gilbert C. White, Durham, N. C., Const. Engr.

N. C., Dallas—City, W. N. Plett, Eng., opens bids June 6 to install water works. (Lately noted.)

N. C., Elkin—City let contract at \$24,500 to Meyers Construction Co., Charlotte, N. C., for water and sewer construction.

N. C., Greensboro—For full details see Mch. Wanted—Water Works, etc.

N. C., Kinston—City, M. M. Happer, Mayor, let contract at \$11,000 to Virginia Mch. & Well Co., Richmond, Va., for boring 3 wells at secondary pumping station near Hillcrest.

Okla., Ardmore—City, Kirk Dyer, Mgr., will expend \$300,000 to construct new dam and water main extensions, dam to cost about \$150,000; opens bids May 22. (Lately noted.)

Okla., Thomas—City install pumping plant and wells; H. G. Olmstead, 415 Oil Exchange Bldg., Oklahoma City, Okla., Engr.

Tenn., Germantown—City, J. M. Thompson, Clerk, will erect water works plant; install fuel oil engine, 35 H. P., 37½ K. V. A.; A. C. generator; Orgill Bros., Memphis,

Tenn., Mch. Contrs. (See Mch. Wanted—Electrical Equipment.)

Tenn., Nashville—For full details (See Mch. Wanted—Water Works.)

Tex., Brady—City let contract to Carroll Gray to construct dam at Lake Shopshire.

Tex., Center—City, J. W. Shotwell, Mgr., will construct sewer and water systems let contract to American Cast Iron Co., Dallas, Tex. for 3¼ ml. 6-in. water pipe; to Briggs-Weaver Co., Dallas, 2 centrifugal pumps; to Morey & Morey, Dallas, one automatic Chlorinator; E. E. Sand, Const. Engr., 421 Mason Building, Houston. (See Mch. Wanted—Water and Sewer Construction.)

Tex., Houston—City, O. F. Holcomb, Mayor, let contract at \$13,400, to Chas. S. Basham, for erection of settling tanks at Houston Heights and West End plant.

Tex., Marlin—City let contract at \$58,867.75 to Hess & Skinner, Dallas, for construction of dam and spillway.

Tex., Wichita Falls—City will install filtration plant, double capacity; cost \$20,000. Address The Mayor.

Va., Ashland—City contemplating extending water and sewer system, may vote on \$70,000 bonds. Address The Mayor.

Va., Petersburg—For full details see Land Development.

W. Va., Wheeling—The J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa., advises the Manufacturers Record of the award to them of the contract for engineering work on this city's \$2,000,000 water works project; now at work on surveys and design plans for various portions of the work, and should be ready for letting of bids on some parts in 90 days. (Previously noted incorrectly.)

Woodworking Plant.

Md., Cumberland—Wood Specialties—Kund & Eiben, Mfg. Co., 204 Warrington Ave., Pittsburgh, Pa., reported to establish plant for manufacture of cabinets and hardwood specialties; purchased 4-acre site.

Md., Hampstead—Truck Bodies—Hampstead Mill & Body Works, capital \$100,000, inctpd. by Herbert Hammond, R. Blaine Murray and Nicholas J. Walsh.

N. C., Burlington—Coffins—Burlington Coffin Co., erect 2 and 3-story plant buildings, fireproof, brick construction, including office, stock rooms, factory building and dry kilns, install automatic sprinkler apparatus; razing of old buildings under way.

N. C., New Bern—Shooks, etc.—International Lumber & Shook Co., Philadelphia, Pa. reported to establish branch plant.

Tenn., Johnson City—Flooring—Sam. R. Sells, Propr., Sells Flooring Mills, install equipment for mfr. of parquet flooring; mch. purchased; daily capacity about 20,000 feet.

Tenn., Memphis—Furniture—King Haase Furniture Co. increased capital to \$350,000.

Tenn., North Memphis—Shuttle Blocks, etc.—Golf Shaft & Block Co., capital \$250,000, inctpd. with R. E. Dickinson, Prest.; F. Work, Mgr.; purchased established plant; mfr. golf shafts and shuttle blocks for cotton mills.

Tex., Dallas—Battery Boxes—Dallas Battery Box Co., leased building, install mch. for manufacture of battery boxes, purchased.

Va., South Norfolk—Wood Products—Hudleston Mahogany Co., capital \$250,000, inctpd. by William W. Crump, R. Grayson Dashiell, both Richmond, Va. and others.

Va., Suffolk—Buggies, etc.—Parker Buggy Co., B. E. Parker, Propr., rebuild plant, burned at loss of \$150,000.

FIRE DAMAGE

Ala., Greenville—School building; loss \$20,000. Address Board of Education.

Ark., Paragould—Bertrig Bros. Cotton gin; loss \$35,000.

Ala., Wetumpka—Speer-Harris Lumber Mill Co.'s boiler room; loss not estimated.

Ark., Hot Springs—D. Burgauer Estate's building on Prospect Ave., occupied by Sentinel-Record, Geo. Brenner & Co., and others; loss \$75,000.

Fla., Branford—Branford Lumber Co.'s mill; loss approx. \$100,000.

Fla., Pensacola—Cooperative Growers Assn.'s store at Figland Park.

Ga., Bainbridge—Elberta Crate Co.'s saw mill.

Ga., Madison—W. S. Reid and H. T. Shaw's warehouses.

Ky., Jackson—Jackson Lumber & Supply Co.'s plant, 2 residences; total loss \$150,000.

Md., Baltimore—Canton Box Co.'s main building on Luzern Ave.; loss \$100,000.

Miss., Biloxi—Rivera Hotel; loss \$10,000. Address The Proprietor.

Mo., Jefferson City—Castle Rock Clubhouse owned by Fred Benke, Ben Robben, Walter Ottman and others.

N. C., Charlotte—Western Newspaper Union building, owned by A. H. Turney.

N. C., Louisburg—Stemmers of C. B. Cheatham branch of J. P. Taylor Tobacco Co.; loss \$125,000.

N. C., Raleigh—Administration bldg. at Samarand Home in Sandhills; loss \$12,000 to \$15,000.

N. C., Samarand—Administration building at Samarand Home for Wayward Girls; loss \$12,000.

N. C., Yadkinsville—Gregory—Parker Lumber Co.'s dry kiln; loss not estimated.

S. C., Fort Lawn—Jno. G. Cousar's store.

S. C., Lugoff—Louis I. Gulon's residence, Green Hill.

Tenn., Chattanooga—Brick building occupied by J. T. Holdham Cabinet Shop and Ideal Clothing Mfg. Co.; estimated loss \$60,000.

Tex., Abilene—Cowden Hall at Simmons College; T. R. Carswell, Burear; loss \$60,000.

Tex., Beaumont—J. M. Gilbert's building at Pearl and College Sts., occupied by I. J. Abelson & Co. and Gasow Motor Co.

Tex., Brownwood—W. R. Scrimgeour & Son's garage; loss \$30,000.

Tex., Corpus Christi—Rolling Supply Co.'s building; Weidenfeld's Furniture Store.

Va., Petersburg—Coggin Hall on Tar Bay; owned by L. S. Brenner; loss about \$25,000.

Va., Stuart's Draft—Peoples Bank building; J. H. Weaver Produce House; G. E. Shaner's store; Herbert Harris' residence.

Va., Suffolk—Parker Mfg. Co.'s plant; loss \$150,000.

W. Va., Athens—Mercer Healing Springs Hotel; Dr. W. H. Wallingford and others, inceptors; Princeton.

will erect building on Central Ave.; cost \$150,000; 6 stories; 55x90 ft.; fireproof.

Mo., St. Charles—Knights of Columbus Home Assn., Edward Kister, Prest., will erect building; cost \$30,000 to \$35,000; site purchased.

N. C., Charlotte—Joseph D. Henson Post, American Legion will erect clubhouse; auditorium to seat 1000, stage dressing room on first floor; offices, pool room, bedrooms, showers and probably gymnasium on second floor.

N. C., Thomasville—Ancient Free and Accepted Masons plan to erect temple; cost \$15,000; 2 stories; brick; banquet hall and kitchen on first floor; lodge rooms on second.

Tex., Sherman—Old Settlers Assn. will erect auditorium to be completed later; present cost \$13,000; 140x140 ft.; steel; composition roof; concrete floor; Clyde & Roff, Archts.

Tex., Palacios—State Baptist Young People's Union will erect administration building at encampment; cost about \$10,000; auditorium to seat 3500; choir loft to seat 250.

Tex., San Antonio—Young Mens Christian Assn., R. N. Watts, Gen. Secy., will erect building; cost about \$200,000.

Va., Ocean View—Afam Club, A. F. & A. M., George F. Fulford, Chrmn. Bldg. Comm., plans to erect club house; cost \$50,000; sleeping quarters.

W. Va., Montgomery—Henrietta Lodge No. 82; I. O. O. F., P. J. Grant, Secy., will erect building; about 50x90 ft.; 2 stories; brick; flat roof; natural gas heat; electric lights; 2 stories, 24x90 ft., on first floor; W. H. Coley, contr. on percentage basis.

Bank and Office.

Ala., Selma—Dr. G. A. Swift will remodel Swift Drug Co. building on Broad St., for medical office building; cost \$15,000; stone front.

Ala., Selma—Deans Weaver, of Seminole, plans to erect office building on site of burned structure; 6 stories; fireproof; elevators.

Ark., Little Rock—Little Rock Branch Federal Reserve Bank of St. Louis, A. F. Bailey, Mgr., Little Rock, will receive bids until June 5 to erect branch bank; plans and specifications from Thompson & Harding, Archts., 509 Southern Trust Bldg., Little Rock.

Ark., Stuttgart—Exchange Bank will complete bank and hotel building on which work was suspended in 1921; Mann & Stern, Archts., Little Rock, will let contract about June 1.

Ga., Atlanta—Atlanta Builders' Exchange, W. H. George, Prest., plans to erect building; probably 3 or 4 stories.

La., Arcadia—Bank of Arcadia, O. R. Robinson, Secy., will erect bank building; brick; L. Miller & Son, Archts.

La., New Orleans—Citizens Bank & Trust Co., A. J. Stallings, Chrmn. Bldg. Comm., will erect addition; new front with columns; 5 stories; terra cotta; brick and tile; composition roof; marble, tile and wood floors; low pressure steam heat; electric lights; electric elevators; Nolan & Torre, Archts.; bids opened about June 10. Address Mr. Stallings. (Lately noted.)

Mo., Kansas City—Albert R. Jones and Kansas City Structural Steel Co. will complete Athletic Club structure; cost about \$2,000,000; site 100x142 ft.; steel frame; 21 stories; cafeteria and stores on first floor, offices above; 8 elevators; Holt, Price & Barnes, Archts.

Wrecked by Explosion.

Ala., Birmingham—Birmingham Buggy Co.'s plant; loss \$75,000.

BUILDING NEWS
BUILDINGS PROPOSED

Apartment Houses.

D. C., Washington—Harry Wardman, 1430 K St., N.W., will erect apartment house at 16th and M Sts., N.W.; concrete and steel; 88 apartments; 8 stories; Wardman & Waggaman, Archts.

Fla., Miami—Albert R. Borrill will erect apartment house at Washington Ave. and 3rd St.; 3 stories; concrete; cost about \$20,000.

Fla., Miami—J. Ken Roberts will erect Don Apartments in Fort Dallas Park; 114.5x46 ft.; 3 stories; concrete; fireproof; 29 apartments of 1, 2 and 3 rooms; hot water heat; built-in kitchens and refrigerators; G. L. Miller Bond & Mortgage Co. will arrange finances.

Fla., Tampa—Frank J. Wyan is preparing plans for apartment house on Bayshore Blvd.; cost \$30,000; Spanish design; 16 apartments.

Ga., Atlanta—E. J. Houser will erect 6 two-story apartment houses at 153-55-59-63 Lindsey St.; cost \$1750 each; frame.

Md., Baltimore—Commonwealth Realty Co., Equitable Bldg., will erect apartment house at Forest Park Ave. and Garrison Blvd.; cost about \$75,000; 3 stories; brick; 75x118 ft.; 12 apartments of 5 rooms and baths; Stanislaus Russell, Archt., 11 E. Lexington St.

Mo., Kansas City—Phillip Minkin will erect 2 apartment buildings on Armour Blvd. and Cherry St.

Okl., Oklahoma City—Fred Polizny will erect apartment house at 151 E. Park Pl.; cost \$15,000; brick veneer.

Tenn., Chattanooga—W. F. McGaughey

will erect apartment building at 716 Payne St.; cost \$20,000; brick; 3 stories; 11 apartments.

Tenn., Memphis—A. E. Bird will erect apartment house at 1812 N. Parkway; cost \$15,000; brick veneer; Sieg & McDaniel, Archts.

Tenn., Memphis—T. J. Bobbitt will erect apartment house at 757 Madison St.; cost \$20,500; 2 stories; brick.

Tex., Dallas—M. E. Williams will erect apartment house at 104-06 S. Rosemont St.; cost \$12,500; brick veneer; 16 rooms.

Tex., El Paso—F. A. Hughes will erect apartment house at Piedras and Gold Sts.; cost \$50,000; 3 stories.

Tex., Galveston—J. St. Mary will receive bids until June 1 to erect apartment house at 7th St. and Avenue K; fireproof; 12 apartments; 3 stories; brick; P. G. Silber & Co., Archts., San Antonio. (Lately noted.)

Tex., San Antonio—Anna Dawson will erect frame and stucco apartment house on 6th St.; cost \$12,500.

Association and Fraternal.

Ky., Louisville—Union Labor Temple will erect building at 127 W. Market St.; cost \$250,000; C. B. Baker, 323 E. Jacob St., Contr. for concrete footings. (Previously noted.)

Miss., Grenada—Ancient Free and Accepted Masons plan to erect temple at Main and 2nd Sts.

Miss., Laurel—Ancient Free and Accepted Masons, B. J. Blethen, Chrmn. Bldg. Comm.,

Mo., Kirksville—Higbee & Mills will erect office building at Washington and Marion Sts.

N. C., North Wilkesboro—Bank of North Wilkesboro will erect 2-story bank building at B and 9th Sts.; 50x140 ft.; Chas. A. Hartman, Archt., Greensboro. (Lately noted.)

S. C., Newberry—Commercial Bank, John M. Kinard, Pres., will receive bids until June 6 for remodeling and heating bank building; drawings and specifications from Edwards & Sayward, Archts., Atlanta, Ga., Commercial Bank, Newberry, S. C., Builders' Exchanges, Columbia, S. C. and Atlanta, Ga.

Tenn., Nashville—Farmers & Merchants Bank will remodel brick building at 310-312 3rd Ave., north; cost \$20,000.

Tex., Fairfield—Fairfield State Bank will erect building.

Tex., Houston—Cotton Exchange, K. E. Womack, Pres., will erect building.

Tex., Houston—Southern Loan & Investment Co., will erect Bankers Mortgage Bldg. on Main St. at Capitol Ave.; cost \$84,000 complete; 59.6x101 ft.; 6 stories; brick and concrete; fireproof; A. C. Finn, Archt.

Tex., Teague—First National Bank will remodel brick building; P. G. Silber & Co., Archts., San Antonio; separate bids for plumbing, heating, wiring and fixtures.

Tex., Waco—Liberty National Bank, John Wright, Pres., will erect building at 6th and Austin Sts.; probably 8 to 12 stories; Birch D. Easterwood, Archt. (Lately noted.)

Va., Richmond—Allan, Saville & Sneed are promoting company to erect bank and office building at 3rd and Grace Sts.; 10 stories; plans ready for bids about June 1.

Churches.

Ark., Little Rock—First Baptist Church, Rev. L. M. Sipes, Pastor, will remodel building at 12th and Louisiana Sts.; cost \$25,000 to \$30,000; auditorium, including balconies, to seat 1500; Sunday school department to seat about 1000; basement.

Fla., Haines City—Methodist Church, Rev. A. C. McCall, Pastor, will erect church and Sunday school; first unit to cost about \$25,000; brick or hollow tile stucco; shingle roof; hardwood and concrete floors; hollow fireproof and interior tile; metal ceilings; ornamental terra cotta; rolling partitions; ventilators. (Lately noted.)

La., Lake Charles—Live Oak Baptist Church, Colored, Rev. E. M. Kaigle, Pastor, will erect building between 11th and 12th Sts.; brick; composition roof; cost \$10,000.

N. C., Asheville—First Baptist Church will erect Sunday school building; cost \$40,000; brick; 4 stories; accommodate 1000; other units to follow; cost about \$200,000. Address The Pastor.

N. C., Concord—First Baptist Church, Rev. G. A. Martin, Pastor, will erect building; steel, stone and brick; slate roof; J. M. McMichael, Archt., Charlotte.

N. C., Wilmington—St. James' Episcopal Church will erect parish house addition; cost about \$50,000. Address The Rector.

N. C., Winston-Salem—Home Moravian Church will erect addition to Rondthaler Memorial Sunday school building; 31x40 ft.; 3 stories. Address The Pastor.

N. C., Winston-Salem—First Baptist Church, E. 2nd St., plans to erect building; cost about \$250,000. Address The Pastor.

S. C., Pickens—Presbyterian Church, Rev. H. A. Knox, Pastor, plans to erect building; cost \$10,000; brick veneer; memorial windows.

Tenn., Columbia—St. Paul's African M. E. Church will erect building. Address The Pastor.

Tenn., McMoresville—Methodist Church,

Rev. Mr. Nunnely, Pastor, plans to erect building.

Tex., Amarillo—Second Baptist Church, Rev. C. E. Griswold, Pastor, plans to erect building.

Va., Norfolk—Burrows Memorial Baptist Church, O. L. Gilbert, Chrmn. Bldg. Comm., will erect annex at 38th St. and Bluestone Ave.

Tex., Teague—First Baptist Church, E. Homer Tiley, Chrmn. Bldg. Comm., Box 915, will erect building; lately noted; cost \$35,000; 95x72 ft.; brick veneer; tile roof; concrete and pine floors; rolling partitions; hot-air heat; T. J. Galbraith, Archt., Dallas; bids opened about June 1. Address Mr. Tiley. (See Mch. Wanted—Brick; Heating Plant; Lumber; Windows.)

City and County.

Fla., Miami—Fair Building, Courthouse, etc.—County will vote June 20 on \$1,880,000 bonds, including \$200,000 to purchase site and erect fair building and \$680,000 for courthouse and site. Address County Commissioners.

Md., Baltimore—Comfort Station—Board of Awards, Mayor Wm. F. Broening, Pres., will erect comfort station at 1801-03 Little Walsh St.

Mo., Richmond—City Hall—City plans to vote on \$30,000 to \$50,000 bonds for city hall. Address The Mayor.

N. C., Asheville—Agricultural and Live Stock Building—City and Buncombe County will not vote June 3 on \$100,000 bond issue as lately reported.

Tex., Edinburg—Community Building—City will remodel jail for community building. Address The Mayor.

Va., Portsmouth—Stables—City Council will erect building at Portsmouth Cotton Mfg. Co., on Chestnut St., for city stables and Grimes Battery. Address City Mgr.

Courthouses.

Ga., Claxton—Board of Commrs. of Roads and Revenues of Evans County will receive bids until June 15 to erect court house and jail; plans and specifications from office Board of Commrs. and from Jas. J. Baldwin, Archt., Anderson, S. C.

Ga., Macon—Bibb County Commrs., J. Ross Bowdre, Clk., will receive bids until May 30 to remodel and erect addition to courthouse; cost about \$400,000; will erect 4 stories; 120x120 ft.; reinforced concrete; concrete foundation; install heating plant; electric wiring and conduits; alternate bids for granite or limestone walls from grade line to first floor with oolithic limestone or brick from first floor level to sill-line of second floor; plans and specifications from Curran R. Ellis, Archt., or Henry J. Behr, Asso. Archt., 201½ Cotton Ave. (Lately noted.)

Dwellings.

Ala., Birmingham—F. B. Winslow will erect residence at 10th Ave. near 42nd St., South; cost \$10,000.

Ala., Montgomery—Hugger Bros. Construction Co. has permit to erect dwelling at 1409 S. Perry St.; cost \$12,000; 1½ stories; frame; also 1-story brick building at 13 Marshall St.; cost \$6000.

Ark., Little Rock—Dr. Shelby Atkinson plans to erect 3 dwellings near E. 3rd St.

Ark., Little Rock—Dr. J. S. Martin, Dixie Oil Mill, will erect 5 dwellings on E. Third St.

Ark., Pine Bluff—M. E. Bloom, Citizens Bank, will erect brick bungalow on 15th Ave. and one on Olive St.

D. C., Washington—H. R. Howenstein Co. will erect 35 Colonial type dwellings on square bounded by Kentucky Ave., 17th St., H St. and Pennsylvania Ave.

D. C., Washington—W. C. & A. N. Miller, 911 Union Trust Bldg., will erect 5 dwellings and garages at 2713-21 29th St., N. W.; cost \$50,000; 2 stories; 22x36 ft.; brick; slag and tile roofs; oak floors; hot water heat; electric lights; plans and construction by owner.

Fla., Jacksonville—R. L. Sevil will erect dwelling on Lancaster St.; cost \$12,000; 2 stories; hollow tile.

Fla., Miami—Joseph Monfils will erect 10-4-room bungalows; stucco; baths; cost \$40,000.

Fla., Miami—Mrs. Hattie A. Messick will erect Spanish bungalow on N. W. 11th St. near W. Flagler St., Genroyal; stucco; Spanish tile roof; tile and hardwood floors; tile wainscoting in bathrooms; porches; built-in bookcases, buffet, etc.; Homer I. Messick, Archt.

Fla., Orlando—V. E. Estes will erect tile and stucco residence; cost \$15,000.

Fla., St. Petersburg—Schooley & Murphy, Contrs., will erect dwellings at 135-139-129 14th Ave.; total cost \$25,000; hollow tile; stucco; 8 rooms and baths; construction by owner.

Fla., Tampa—W. F. Ferman will erect Colonial residence on Bayshore Blvd.; cost \$25,000; Frank J. Wynn, Archt.

Fla., Tampa—C. H. Knowles will erect Colonial residence at Sunset Lake near Sulphur Springs; cost about \$16,000; Frank J. Wynn, Archt.; Reasoner Bros., Landscape Archts., Oneco.

Fla., Tampa—Julius Leiter will erect residence on Bayshore Blvd.; cost about \$12,000; Spanish design; Frank J. Wynn, Archt.

Fla., West Palm Beach—Theodore Elsfeldt will erect residence in Primavera Estates; cost \$30,000; 78x75 ft.

Fla., West Palm Beach—Benj. F. Hoffman, Contr., will erect dwelling in Floral Park; cost \$4000; 16x25 ft.; also dwelling in Bungalow Park; cost \$8000; 44x24 ft.

Ga., Atlanta—H. Hatcher will erect duplex dwelling at 140 Myrtle St.; cost \$12,000; 2 stories; brick veneer.

Ga., Atlanta—J. C. Kirkpatrick will erect dwelling at 1024 Candler St.; cost \$12,000; 2 stories; brick veneer.

Ga., Atlanta—D. Levinstein will erect 2 dwellings at 124-128 Elmwood Ave.; cost \$5000 each; 1 story; brick veneer.

Ga., Atlanta—G. G. Long will erect 3 dwellings, 301 Stewart Ave., 15 Lexington St., 121 Allene Ave.; total cost \$17,000; 1 story; frame.

Ga., Atlanta—Mrs. Nora G. Webb will erect 2 dwellings at 28-32 Linwood Ave.; cost \$6000 each; 1 story; brick veneer.

Ga., Atlanta—C. C. Case will erect residence on Habersham Road; cost \$25,000; Hentz, Reid & Adler, Archts.

Ga., Atlanta—Jesse Draper will erect residence; cost \$20,000; Hentz, Reid & Adler, Archts.

Ga., Atlanta—William Dunlap will erect residence; cost \$10,000; brick and tile; tile roof; DeFord Smith, Archt.

Ga., Macon—Dr. Wm. G. Lee will erect residence in Shirley Hills; cost about \$28,000; 2 stories and basement; impervious brick; tile roof; concrete and hardwood floors; hot water heat; hollow fireproof and interior tile; safes; wire glass; Dunwoody & Oliphant, Archts.; bids opened about June 1. (Lately noted.)

Ky., Bonnyman—Liberty Coal Co., Inc.,

will not erect dwellings as lately reported.

Ky., Ligon—Elkhorn Block Coal Co., F. L. Stewart, Pres., plans to erect 25 miners' houses.

La., New Orleans—Peter J. Kelly, Italian Homestead Assn., will erect dwelling at Freret and S. Robertson Sts.; cost \$13,000; construction by owner.

La., New Orleans—L. D. Sokoskey will erect duplex dwelling on Robert and Howard Sts.; total cost \$13,000; construction by owner.

Md., Baltimore—Geo. W. Schoenhals, 101 S. Linwood Ave., will erect 6 dwellings at 2921-2931 Baker St.; cost \$22,000; brick; 2 stories; five 16x57 ft., one 20x57 ft.; slag roofs; hot water heat; Joseph F. Hirt, Archt., 829 N. Luzerne St.; construction by owner. (Lately noted.)

Md., Baltimore—J. H. Wolfe will erect Dutch colonial residence and garage on Norwood Rd. near Northway, Guilford; 2½ stories and basement; 11 rooms and 3 baths; Roy G. Pratt, Archt., 323 N. Charles St.

Md., Baltimore—Model Construction Co., 203 S. Robinson St., will erect 14 dwellings at 5324-50 Maple Ave.; cost about \$40,000; 2 stories; brick.

Md., Baltimore—Northwest Real Estate Co. will erect 3 dwellings and garages at 3600 Cedarvale Rd. and 3605-3610 Copley Rd.; cost \$15,000; 1½ stories; frame.

Md., Baltimore—J. E. Stansbury, Inc., 2852 Pennsylvania Ave., and others, will erect 12 dwellings on Monroe St. and Elgin Ave.; cost \$35,000; 2 stories; brick; 20x30 ft.; slag roofs; steam heat; George Wessel, Archt., 2752 Winchester St.; construction by owner. (Lately noted.)

Md., Baltimore—Annie R. Lamb, Sycamore Rd. opposite Hollen Rd., Cedarcroft, will erect residence on Sycamore Ave. near Gittings Ave.; 2½ stories; brick; cost \$12,000.

Md., Baltimore—Montebello Park Co., 11 E. Fayette St., will erect 14 dwellings, 12 on Augusta and Southern Aves., one on Overland and Forest View Aves. and one at 4501 Maine Ave.; cost \$35,000; 1 story; frame.

Md., Baltimore—Welsh Construction Co., 11 E. Fayette St., will erect 20 dwellings at 1527-45 and 1526-44 N. Payson St.; cost about \$35,000; 2 stories; brick.

Md., Baltimore—Phillip S. Morgan, 807 N. Charles St., will erect 4 dwellings, Park Heights and Oswego Aves.; 7 Oswego Ave.; near Park Heights Ave.; 3 Pimlico Road, near Oswego Ave.; cost \$35,000; 18.6x31 ft.; slag roofs; steam heat; George Wessel, Archt., 2752 Winchester St.; construction by owner.

Mo., Kansas City—Agee-Block Construction Co. will erect residence at 37th and Holmes Sts.

Mo., Kansas City—Carl A. Brand will erect residence at 6112 Summit St.; cost \$10,000.

Mo., Kansas City—George P. Jackson will erect Italian type residence on Brookwood Rd.

Mo., Kansas City—E. V. Mittong will erect 6 dwellings at 5628-5638 Lydia Ave.; cost \$2,000 each.

Mo., Kirksville—G. P. Underhill will erect 3 bungalows on E. Normal Ave.

Mo., St. Louis—Ottmar G. Stark Realty Co. will erect 12 bungalow-flat dwellings on Laurel and Wells Aves., West End; 2 stories; brick; hot water heat; tile baths; flats of 4 to 6 rooms.

Mo., Springfield—P. O. Wood will erect residence at 1009 S. Fremont Ave.; cost \$13,000.

Mo., Springfield—Mary J. Hine will erect residence at 833 Weller Ave.; cost \$10,000.

N. C., Greensboro—E. E. Bain, Jr. will erect Spanish type residence on Edgedale Rd., Irving Park.

N. C., Greensboro—Irving Park Co. will erect dwelling on Country Club Drive, Irving Park.

Okla., Oklahoma City—H. R. Huffman will erect dwelling and garage at 300 W. 19th St.; cost \$20,000; brick veneer.

Okla., Oklahoma City—H. R. Bernhagen will erect 4 dwellings and garages, 1700-04-68-12 W. 31st St.; frame; cost \$5,000 each.

Okla., Oklahoma City—Frank Hoopes will erect brick dwellings and garages at 2112-2118 W. 20th St.; cost \$5,000 each.

Okla., Oklahoma City—Thomas & Hoopes will erect dwelling and garage at 2106 W. 17th St.; frame; also dwellings at 2112 and 2118 W. 17th St.; brick; cost \$5,000 each.

S. C., Columbia—W. G. Gudmunson will erect residence at Shandon Terrace; cost, \$10,500; contract let June 10; Robert Elsen-schmidt, Archt., Minnaugh Bldg.

S. C., Columbia—E. L. Reeves will erect residence in Shandon; cost \$12,500; brick and tile; composition roof; Robert Elsen-schmidt, Archt., Minnaugh Bldg.

S. C., Honea Path—Chiquola Manufacturing Co. will erect 150 operatives' houses; also dwellings for superintendent and bosses; cost about \$50,000; J. E. Shirrine, Archt., Greenville.

Tenn., Chattanooga—W. M. Riggsby will erect dwelling on Rossville Ave. between Adams and Jefferson Sts.; cost \$12,000; brick.

Tenn., Memphis—Clinton Building Co. will erect duplex dwelling, 212 Angelus St.; cost \$12,000; stone veneer.

Tenn., Memphis—Florence Dryfus will erect dwelling at 195 Angelus St.; cost \$10,500; brick veneer; 12 rooms.

Tenn., Memphis—M. H. Furbinger, Jones & Furbinger, Architects, will erect duplex residence on Goodbar Pl. near Melrose St.; cost about \$15,000; brick and stucco; shingle roof; hot water heat; 4 rooms, kitchen, sun parlor, breakfast and sleeping porches in each section.

Tenn., Memphis—Henry Solomon will erect brick veneer dwelling at 532 S. Belvedere Ave.; cost \$10,500.

Tenn., Memphis—Clarence Saunders purchased 155-acre tract off Central Ave. at Goodwyn Ave.; will erect residence; cost about \$350,000; 200x150 ft.; 2 stories; fire-proof; Spanish type; hollow tile and gray limestone veneer; hardwood and tile floors; separate buildings for light and power plant, refrigerating plant, pumping system, heating plant, laundry, employees, etc.; install pipe organ, construct natatorium and swimming pool and 5-acre fish lake; Hubert McGee, Archt.

Tenn., Memphis—William Chandler will erect 8 dwellings in 1200 block Forest Ave.; cost \$4500 each; brick veneer; 6 rooms.

Tex., El Paso—Fidelity Real Estate Co. will erect three 5-room brick bungalows in Block 28 and four in block 43, Altura Park Addition; cost \$28,000; one 5-room brick bungalow in block 6, one in block 32; cost \$10,000; and one 6-room brick bungalow in block 31, cost \$6,000, Manhattan Heights Addition.

Tex., Galveston—J. W. Spangenberg will erect dwelling at 2609 Avenue J; cost \$10,000; 2 stories; 8 rooms.

Tex., Houston—R. S. Sterling, Prest., Humble Oil & Refining Co., will erect residence, probably in Rossmoyne addition, South End; reproduction of Sterling Castle, Scotland; reported cost \$300,000; Albert C. Finn, Archt.

Tex., Houston—H. F. MacGregor will erect

residence, La Branch and Wentworth Sts.; cost \$12,500; 2 stories; 6 rooms.

Tex., San Antonio—M. A. Harkey will erect Dutch Colonial residence on Bandera Road; cost about \$10,000.

W. Va., Fairmont—Hellen M. Herron will erect residence on Park Drive; cost \$10,500; 2 stories; brick and tile.

Va., Richmond—A. Beirne Blair will erect residence; cost \$25,000; L. P. Hartsook, Archt.

Va., Richmond—Lewis Bosher will erect residence at Chatham Hills, Westhampton; cost \$42,000; Duncan Lee, Archt.

Va., Richmond—Frank A. Hobson will erect residence in Westhampton; cost about \$20,000; Duncan Lee, Archt.

Va., Richmond—Judge William F. Shea will erect residence; cost \$28,000; L. P. Hartsook, Archt.

Government and State.

S. C., Charleston—Post Office—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C., will receive bids until June 13 for extension to workroom, mailing vestibule and driveway at post office; drawings and specifications from Custodian at site or from office Supervising Archt.

Hospitals Sanitariums Etc.

Tex., Teague—City, J. H. King, Mayor, will receive bids until June 8 to erect hospital building; frame and stucco; P. G. Silber & Co., Archts., San Antonio; separate bids for plumbing, heating and wiring.

Va., Bristol—Hospital Commn., H. O. Game, Chrmn. Bldg. Comm., will receive bids until May 31 to erect King's Mountain Memorial Hospital on W. State St.; plans and specifications from C. G. Kearfott, Archt., Bristol, Tenn.-Va. (Lately noted.)

Hotels.

Ala., Montgomery—Exchange Hotel Co. (Jules Heyman and Sam Baron, Augusta, Ga., and W. T. Wilson, Charlotte, N. C.) leased Exchange Hotel and will expend \$30,000 to \$75,000 to improve building; 50 additional baths, cafe, furniture, draperies, equipment, etc.

Fla., St. Petersburg—Emerson Wood will erect hotel at Central Ave. and Beach Dr.

Ga., Macon—Midland City Hotel Co. will expend \$40,000 to remodel rooms in Hotel Dempsey.

Ky., Pikeville—Geo. Johnson will erect hotel at Front and Caroline Sts.; 4 stories; brick.

Tenn., Memphis—Greenwood Inn Corp., Frank Hunter, Pres., will erect hotel on S. Parkway, east, at Bellvue Blvd.; cost \$10,000; cafe, 18x36 ft.; stucco and concrete; tile floors; Mahan & Broadwell, Archts.

W. Va., Mannington—F. W. Bartlett, Mannington Hotel, will erect hotel addition and garage; cost \$40,000; 2 stories and basement; brick; J. C. Burchinal, Archt., Trust Bldg., Fairmont; day labor.

Miscellaneous.

Fla., Tampa—Social Center—Sacred Heart Church, Rev. Jos. E. Farrell, Pastor, is interested in erection of building; G. A. Miller is low bidder.

N. C., Charlotte—Clubhouse—Woman's Club, Mrs. I. W. Faison, Chrmn. Comm., will erect building; brick.

Tenn., Memphis—Fair Building—Memphis Park Commn., L. M. D'Saussure, Secy., will erect administration building, rest room and main entrance at Tri-State Fair Grounds; bids opened May 24, at office Chas. O. Pfeil and Geo. Awsumb, Asso. Archts., 1403 Union & Planters Bank Bldg.

Tex., Dallas—Cafe—F. I. & S. S. Clark

will remodel interior of Joseph's Cafe, 1415-19 Commerce St.; cost \$20,000.

W. Va., Huntington—Fair—Jos. N. Doyle and J. F. Peck are promoting organization of Huntington-Tri-State Fair Assn. with \$600,000 capital; leased 120-acre site in Barboursville Dist. and will expend \$200,000 at present for erection of buildings; construct merchants' and manufacturers' exhibit building, coliseum for horse and cattle shows; steel and concrete; also construct automobile and horse race tracks; ultimate expenditure about \$500,000.

Schools.

Ala., Bessemer—County Board of Education will erect school at Providence.

Ala., Coker—County Board of Education, T. W. Smith, Asst. Supt., Tuscaloosa, will erect school.

Ala., Lipscomb—Jefferson County Board of Education, Birmingham, will erect school; 7 rooms; brick; D. Q. Whilldin, Archt., Title Guarantee Bldg., Birmingham, receiving bids. (Previously noted.)

Ala., Mobile—Board of School Commissioners, J. A. Hurt and others, will expend \$201,000 to erect school as follows: 10-rooms school, Oakdale section, cost \$40,000; 8-room school, Government street loop district, cost \$32,000; 10-room negro school, cost \$50,000; 10-room school, Prichard, cost \$40,000; 8-room structure for negroes at Prichard, cost \$20,000; 6-room building, Wheelerville section, cost \$24,000; building, Hickory Grove, cost \$5,000; also contemplates erection of \$500,000 high school; S. S. Murphy, Supt. of Schools.

Ala., Prichard—Board of School Commissioners, J. A. Hurt and others, Mobile, will erect 8-room structure for negroes and 10-room school for whites; cost \$20,000 and \$40,000. (See Ala., Mobile.)

Ala., Sulligent—Sulligent School Dist. Trustees will erect school; \$10,000 bonds voted.

Ala., Tuscaloosa—City Board of Education will receive bids for additions to Stafford and West End schools; plans and specifications at office D. O. Whilldin, Archt., Title Guarantee Bldg., Birmingham.

Ark., Pine Bluff—Jefferson County Board of Education, W. P. Keith, Supt., will erect buildings for Union High School, White Hall School and Hardin School.

Ark., Turrell—School Board will erect building; 6 rooms and auditorium; brick veneer and ornamental terra cotta; metal roof; concrete floors; steam heat; Sieg & McDaniel, Archts., Memphis, Tenn. (Previously noted.)

Fla., Groveland—Lake County Bd. of Public Instruction, W. C. Jones, Act. Chrmn., Tavares, called election June 10 on \$16,500 bonds to enlarge schools.

Fla., West Palm Beach—County Board of Public Instruction, Agnes Ballard, Supt., will erect school at Kelsey City, addition to Palm Beach School and improvements to other structures; \$200,000 bonds voted.

Ky., Bowling Green—School Board will erect high school and improve ward schools; \$100,000 bonds voted.

Ky., Hickman—Board of Education, F. T. Randle, Secy., will receive bids until June 6 to erect 2 schools; \$30,000 bonds available; W. E. Gore, Archt., Paducah. (Lately noted.)

Ky., Middleboro—Board of Education will erect high school; cost \$90,000; Manley & Young, Archts., Knoxville, Tenn.

Ky., Owensboro—Board of Education, J. L. Foust, Supt., will erect Eastern Colored

School; brick and stone; Arthur F. Hussander, Archt., 646 Clark St., Chicago. (Previously noted.)

Md., Berwyn—School Board will erect building for Berwyn-Branchville District; cost \$25,000.

Md., Baltimore—Board of Awards, Mayor Wm. F. Broening, City Hall, will make following improvements: install heating in School No. 113, electric wiring in Schools Nos. 3, 20, 106, 15, 16, 21, 32, 43, 45, 48, 55 and 58 and new plumbing in Curtis Bay School; Henry Adams, Engr., 1263 Cathedral St.; electric wiring in Schools Nos. 13, 84, 98, 105, 106 branch and Teachers' Training School; Chas. L. Reeder, Engr., 916 N. Charles St.; wiring in Schools Nos. 10, 47, 57, 60 and 61, heating in Nos. 94 and 110, heating and wiring in Nos. 83, 11 and 81; Herman Eisert, Engr., 11 E. Lexington St.; wiring in Nos. 68, 72, 74, 102 and Orangeville; Jas. Posey, Engr., 11 E. Pleasant St. (Lately noted.)

Md., Baltimore—Johns Hopkins University, Dr. Frank J. Goodnow, Prest., will erect first unit of 4 dormitories at Homewood; cost about \$350,000; 323x131 ft.; 3 stories and basement; Colonial type; brick; accommodate 140 students; bids opened May 24; Edw. L. Palmer, Archt., 513 N. Charles St. (Previously noted.)

Miss., Gulfport—Harrison-Jackson Consolidated School Dist. will erect building; brick; cost \$15,000. Address County Board of Education.

Miss., Jackson—School Trustees, Edw. L. Bailey, Secy., will receive bids until June 5 to erect school and improve Central High School; plans and specifications at office N. W. Overstreet, Archt.

Mo., Madrid—Board of Education, H. G. Sharp, Prest., will erect addition to and repair school; bids opened May 25.

Mo., Marshall—Board of Education will erect high school and 2 grade schools; W. W. Huff, City Engr.; \$199,000 bonds voted. (Lately noted.)

Mo., Pauls Valley—Board of Education, J. T. Bucher, Supt., will receive bids until May 27 to erect addition to high school; cost \$110,000; 2 stories and basement; brick; stone trim; plans and specifications at office Clerk of Board of Education, and Jewel Hicks, Archt., 10½ Main St., Oklahoma City. (Lately noted.)

Mo., Poplar Bluff—School Board, P. C. Hayes, Secy., will receive bids until May 29 to erect Benton School; cost \$50,000; 2 stories and basement; brick; steam or hot water heat; 8 rooms; Martin Laubis, Archt. (Lately noted.)

Mo., Potosi—School Board will erect high school building.

Mo., St. Louis—Lindenwood College will expend \$100,000 to erect gymnasium, dormitory, construct concrete driveway, install electric lights for approach, etc.

N. C., Bailey—Town will vote May 31 on \$10,000 bonds to erect addition to school. Address School Trustees.

N. C., Canton—City School Board, H. D. Secrest, Secy., will erect building; cost \$50,000; 50x120 ft.; brick and frame; composition roof; oak floors; steam heat; electric lights; Ronald Greene, Archt., Oates Bldg., Asheville; bids opened. (Lately noted.)

N. C., Greenville—East Carolina Teachers' College, Dr. R. M. Wright, Prest., will receive bids until May 29 to erect addition to administration building and dormitory, including plumbing and heating; plans and specifications at office H. A. Underwood, Engr., Joint Bldg. Comm., Raleigh.

N. C., Jonesboro—Jonesboro Grade Schools,

J. Gary Allen, Supt., will erect additional wing to school building; 6 rooms; ordinary construction; metal shingle roof; rift pine and concrete floors; wire glass; ventilators; Stiles S. Dixon, Archt., Fayetteville; bids opened. Address owner. (Lately noted.)

N. C., Lumberton—Thompson township voted \$25,000 bonds to erect high school. Address County Board of Education.

N. C., Mebane—City Board of Education will erect addition to school; 2 stories and basement; brick; stone trim; auditorium to seat 1200; \$75,000 bonds voted; Herbert B. Hunter, Archt., 817 14th St., N. W., Washington, D. C., and Burlington. (Previously noted.)

N. C., Reidsville—School Board, W. S. Sommers, Secy., will receive bids until May 31 to erect high school; plans and specifications at office W. C. Northrup, Archt., Wachovia Bank Bldg., Winston-Salem.

N. C., Oak Hill (R. D. from Oxford)—County School Board, J. F. Webb, Supt., Oxford, will receive bids until May 30 at office C. A. Stovall, Virgillina, Va., to erect school; 6 classrooms and auditorium; plans and specifications at office J. M. Kennedy, Archt., Raleigh, N. C.

N. C., Thomasville—School Board, Jno. R. Myers, Chrmn., will receive bids until June 19 to erect high school; bids as follows: (1) Entire work exclusive of plumbing, heating and ventilating; (2) plumbing; (3) heating and ventilating; structure to cost \$200,000; fireproof; brick, reinforced concrete and hollow fireproof tile; ornamental terra cotta; metal doors; built-up roof; reinforced floors; wire glass; steel sash and trim; drawings and specifications after June 2 at office Harry J. Simmonds, Archt., Greensboro. (Lately noted.)

N. C., Vanceboro—Board of Education, W. C. Winslow, Chrmn., will receive bids until June 1 to erect high school; cost \$35,000; 12 rooms; brick; Barrett roof or equal; Warren-Webster system of heating; Delco lights; plans and specifications on file at offices G. Lloyd Preacher & Co., Archts., Raleigh, N. C., Atlanta and Augusta, Ga.; Mr. Winslow, Vanceboro; Builders' Exchange, Atlanta and Savannah, Ga., and Columbia, S. C.; obtainable from Archts. (Lately noted.)

N. C., Washington—Board of Education, Prof. Frank Ashley, Secy., will erect 3 schools; cost \$500,000; 2 stories and basement; Benton & Benton, Archts., Fidelity Bldg., Wilson. (Lately noted.)

N. C., Weaverville—School Board, J. M. Le Roy, Chrmn., Elizabeth City, will receive bids until June 5 to erect building; separate bids for heating and plumbing; Frank B. Simpson, Archt., Raleigh. (Previously noted.)

Okla., Addington—Board of Education will erect high and ward school; Eads & McCune, Archts., Duncan; bids opened.

Okla., Guthrie—City Board of Education will erect high school and improve ward schools; \$350,000 bonds voted. (Previously noted.)

Okla., Hollister—School Board, Oral Ballard, Clk., will receive bids until May 29 to erect building; brick; plans and specifications at office Butler & Huseman, Archts., Chickasha.

Okla., Kingfisher—School Board will erect high school; cost \$75,000; also improve grade schools; cost \$5,000; bonds voted. (Lately noted.)

Okla., Purcell—Board of Education will erect high school; cost \$50,000; 124x96 ft.; brick; metal ceilings; metal doors; rolling partitions; wire glass; steel sash and trim; vaults; hot water heat; electric lights; bids opened May 29; Hawk & Parr, Archts., Oklahoma City. Address Jno. H. Wells. (Lately noted.)

Okla., Richmond—Richmond Consolidated School District Trustees will erect building; \$40,000 bonds voted.

S. C., Cedar Springs—South Carolina School for Deaf and Blind, Capt. N. F. Walker, Supt., will receive bids until June 7 to office J. F. Cleveland, Spartanburg, to remodel and install heating in west wing; drawings and specifications at office Edwards & Sayward, Archts., Chamber of Commerce Bldg., Atlanta, and office Capt. Walker, Cedar Springs.

S. C., Charleston—The Citadel, Jno. P. Thomas, Chrmn. Bldg. Comm., 27 Cumberland St., will receive bids until May 29 to erect hospital; plans and specifications at office Lockwood, Green & Co., Archts., New Citadel, Charleston; will also erect dormitory and gymnasium; 3 stories and basement and 2 stories; brick and tile; Lockwood, Green & Co., Archts., Atlanta, Ga.

S. C., Columbia—Board of School Comms., W. H. Hand Secy. plans to erect and enlarge buildings; election May 25 on \$75,000 bonds.

S. C., Rock Hill—Rock Hill School Dist. Trustees will erect additional classrooms to several buildings; \$150,000 bonds voted. (Lately noted.)

S. C., Wellford—Wellford School District Trustees will erect building; \$15,000 bonds voted.

Tenn., Chattanooga—Hamilton County Board of Education, Jas. A. Roberts, Supt., will receive bids until June 1 to erect addition to Tyner High School and buildings at Eastdale and Red Bank; plans and specifications at office Chas. E. Bearden, Archt.

Tenn., Knoxville—County Board of Education will erect school at Bearden and improve buildings at Powell's Station and Farragut.

Tenn., Richard City—School Board will erect building; bonds voted.

Tenn., South Pittsburg—School Board plans to issue \$55,000 bonds to erect building and pay indebtedness.

Tenn., Wartburg—School Board, Jno. M. Davis, Chrmn., does not contemplate erection of building as lately reported.

Tex., Bertram—Bertram Independent School Dist. will vote June 3 on \$15,000 bonds to erect 4-room addition to high school.

Tex., Breckenridge—School Board will erect ward school; 3 stories; brick; fireproof corridors; wood floor joist; Clarkson & Gaines, Archts., 606-7 First Natl. Bank Bldg., Fort Worth; bids opened. (Lately noted.)

Tex., Clinton—Clinton School Dist. No. 16, will erect addition to school; \$15,000 bonds voted. Address Dist. School Trustees. (Lately noted.)

Tex., Denison—School Board, J. V. Woolaver, Prest., will erect school for Golden Rule Dist. near Denison; Jno. Tulloch, Archt., Sherman; bids opened.

Tex., El Paso—St. Patrick's Cathedral Assn. will erect building at N. Stanton and River Sts. for community center and parochial school; cost \$200,000; 2 stories and basement; auditorium to seat 1000; gymnasium 52x82 ft.; roof pavilion for kitchen, banquet hall and cafeteria; swimming pool, 30x65 ft.; Beutell & Hardie, Archts.; Rev. M. O'Leary, Pastor, St. Patrick's Cathedral.

Tex., Forney—Forney Independent Dist. School Board, J. M. Davis, Jr., Prest., will erect high school; brick; C. W. Bulger & Son, Archts., Dallas; bids opened.

Tex., Houston—All Saints' Catholic Parish will erect school in Houston Heights; cost \$25,000; 2 stories; brick and hollow tile. Address The Pastor.

Tex., Nacogdoches—Nacogdoches Independent School Dist. voted \$50,000 bonds to erect high school. Address Dist. School Trustees. (Lately noted.)

Tex., Port Arthur—Port Arthur Independent School Dist. Trustees plan election on \$675,000 for improvements to include wings to high school for manual and physical training, addition to DeQueen School, etc.

Tex., Tulla—Tulla Independent School Dist. Trustees will erect high school; \$100,000 bonds available.

Tex., Waskom—School Board, E. W. Farmer, Secy., will erect 2-story brick school; C. G. Lancaster, Archt., Marshall; bids opened.

Tex., Wichita Falls—Wichita Falls Independent School Dist. Trustees, W. W. Brown, Secy., 1518 12th St., will erect high school to cost \$500,000; 2 ward buildings and addition to present building; fireproof; brick; composition roof; hardwood and tile floors; steam heat; electric lights; \$850,000 bonds voted. (Lately noted.)

Va., Danville—Averett College, Dr. Jas. P. Craft, Prest., will erect additional building; cost \$25,000; first floor for swimming pool, shower baths, dressing rooms, etc.; gymnasium above; 2 top floors for dormitory rooms; contractors estimating. (Previously noted.)

Va., East Radford—State Normal School for Women, Dr. J. P. McConnell, Prest., will receive bids until June 1 to erect addition to dormitory; plans and specifications at office Chas. M. Robinson, Archt., Times Dispatch Bldg., Richmond.

Va., Winchester—Stewart Bell and H. F. Byrd, Evening Star, Bldg. Comm., for Handley School Board, will receive bids until June 24 at Handley Library to erect school; cost \$600,000; 400x160 ft.; fireproof; slate and tar and gravel roof; wood and tile floors; low pressure steam heat; W. R. McCormack, Archt., Cleveland, Ohio; bids for any or all of following items; Masonry, carpentry, structural steel and miscellaneous and ornamental iron, lath and plaster, marble and tile, roofing and sheet metal, painting and finishing, heating and ventilating, elevator; plans and specifications from above committee, and Builders Exchange, 15 E. Fayette St., Baltimore. (Lately noted.)

W. Va., Iaeger—Board of School Trustees will erect building; 12 rooms; brick.

W. Va., Martinsburg—Board of Education will receive bids until June 9 to erect proposed high school; cost about \$200,000.

Stores.

Ala., Huntsville—Trigg, Dobbs & Co., Chattanooga, Tenn., will erect building at Jefferson and Arms Sts.

Ala., Russellville—Chas. R. Burgess will erect business building, lately noted; cost \$10,000; 26x100 ft.; 2 stories; concrete and brick; tin roof; metal ceilings; plaster board; wire glass; ventilators; wood floors; stoves and grates; day labor under supervision of M. L. Couch. (See Mch. Wanted—Plumbing.)

Ark., Fort Smith—Fred Browne will erect building at N. 8th and A Sts.; 2 stories; 50x140 ft.; brick.

Fla., Bradentown—R. M. Beall will erect business block on E. Manatee Ave.

Fla., Bradentown—J. M. Richeson will erect business building.

Fla., Bradentown—Singletary & Cummings will erect business building on Main St.

Fla., Bradentown—Geo. Wallace will erect business block on Manatee Ave.

Fla., Tampa—United Markets will erect store at 1505 Grand Central Ave.; cost \$10,000.

Fla., Tampa—South Florida Store Corp.,

will erect building at 810 Grand Central Ave.; cost \$13,000.

Ga., Atlanta—J. C. DeFoor will erect store at 352-60 Virginia Ave.; cost \$10,000; 1 story; brick.

Ga., Atlanta—Massell Realty Co. will erect building at W. Peachtree St. and W. Peachtree Pl. for Quick Tire Co.; cost \$100,000; 3 stories.

Md., Pocomoke City—Lloyd & Blaine will erect building to replace structure lately noted burned.

Miss., Greenwood—Joe Stein, Hotel Irving, will erect hotel; 4 stories; 50 rooms; 3 store rooms on first floor; brick, concrete and steel; bids opened May 20. Address Chas. O. Pfeil, Archt., Memphis, Tenn.

Mo., Kansas City—Louis L. Goldblatt, 213 E. 15th St., will erect business building; 2 stories and basement; brick; stone trim; Victor J. DeFoe, Archt., Scarritt Bldg.

Mo., Kansas City—A. M. Greenwood will erect store at 1706 Baltimore Ave.; 1 story and basement; 36x80 ft.; brick; stone trim; Sunderland & Bescke, Archts., Interstate Bldg.

Mo., Kansas City—A. E. Johnson will erect building at 1814-16 Locust St.; cost \$10,000; 1 story; brick.

Mo., Kansas City—Fred Wolferman Co. will erect store and bakery building at 47th St. and Mill Creek Parkway; Spanish architecture.

N. C., Charlotte—Eldred Department Store, J. B. Eldred, Prest.-Mgr., is reported to erect 5-story building on N. Tryon St.; 125,000 sq. ft. floor space; Louis H. Asbury, Archt.

Okla., Oklahoma City—Campbell & Price will erect store at 626 W. Main St.; cost \$12,000; brick.

Okla., Oklahoma City—Levy Bros. will erect store at 304 W. California Ave.; cost \$15,000; brick.

S. C., Greenville—J. O. Jones Co. will erect building 107-9 N. Main St.; 42x122 ft.; 2 stories; Jones & Trott, Archts.

Tenn., Memphis—R. B. Snowden will expend \$10,000 for repairs to building at 260 Wagner St.

Tenn., Memphis—J. L. Stewart will erect store at 171-75 Cooper St.; cost \$10,000; 1-story; brick.

Tenn., Memphis—Otto Bailer will erect building at S. Main St. and Butler Ave.; cost \$40,000; 3 stories and basement; 25x150 ft.; brick; E. L. Harrison, Archt.; C. S. Glan, contr. for excavation.

Tenn., Memphis—B. B. Well will erect store on N. Madison Ave.; cost \$10,000; 50x75 ft.; 1 story; brick.

Tenn., Memphis—Woods Estate will expend \$10,000 for repairs to buildings at 75 Union St. and 1742 Central St.

Tex., Dallas—L. Blaylock will erect stores at 2021-29 Jackson St.; cost \$25,000; 2 stories; brick.

Tex., Floydada—A. D. White will erect building; cost \$18,000; 50x100 ft.; brick.

W. Va., Bluefield—R. W. Honaker and associates will erect building on Federal St.; 5 stories; Garry & Sheffey, Archts. (Previously noted.)

W. Va., Clarksburg—Oakley Bland will erect building; 4 stories and basement; 80x137 ft.; brick; stone trim; stores and apartments; A. Breternitz, Archt., Fordyce Bldg.

W. Va., Martinsburg—M. A. Little will erect business building on E. Burke St.; cost \$10,000; 2 stories; brick.

W. Va., Ronceverte—Geo. Ellis will erect building on Main St.; 3 stories; brick.

Theaters.

Mo., Kansas City—Max Eichenberg, 19 W.

5th St., will erect theater; 1 story and basement; 58x145 ft.; brick, hollow tile and stucco; Victor DeFoe, Archt., Scarritt Bldg.

S. C., Greenwood—B. F. McKeller will erect opera house; cost \$40,000; 3 stories; seating capacity 1200; J. C. Hemphill, Archt.

Tex., Dallas—Allen F. Marshall will erect picture theater, 1807 Greenville St.; cost \$11,000; brick veneer.

Warehouses.

Ga., Augusta—Bowen Bros. will erect warehouse.

Md., Baltimore—Louis C. Schneidereith, 208 S. Sharp St., and associates will erect warehouse; cost \$22,000; 2 stories; brick.

Va., Richmond—Lehmaier-Schwartz Co. will erect warehouse in South Richmond; cost \$30,000.

BUILDING CONTRACTS AWARDED

Apartment Houses.

Ga., Atlanta—M. B. Hicks will erect apartment house at 265 Holderness St.; cost \$12,000; 2 stories; brick veneer; J. W. Rice, Contr.

Ga., Atlanta—W. S. Cannon will erect apartment house at 83 Old Wheat St.; cost \$11,500; 2 stories; brick veneer; Service Co., Contr.

Ga., Atlanta—G. Lloyd Preacher will erect Bon Air Apartments, Juniper and 8th Sts.; cost \$250,000; 108x110 ft.; 3 stories; 32 suites; reinforced concrete and brick; hardwood floors; built-in beds; steel kitchen cabinets; plans by owner; Gude & Co., Contrs.

Ga., Augusta—Mrs. L. E. Pollard will erect apartment building on Ellis St.; G. Lloyd Preacher & Co., Archts., Atlanta; W. W. Jones, Contr., Augusta.

Ky., Paducah—M. Marks will erect apartment house at Madison and 7th Sts.; Lockwood & Hamby, Contrs.

Md., Baltimore—John B. Brandau, 3103 N. Charles St., Christian Brandau and Adam Brandau, are promoting erection of \$1,250,000 apartment house at Charles and 31st Sts.; 8 stories and basement; rough texture brick; terra cotta trim; fireproof; site, 129x152.3 ft.; 112 apartments; J. E. Moxley, Jr., Archt., 851 Equitable Bldg.; Consolidated Engineering Co., Contr., Calvert Bldg.

S. C., Greenville—Mrs. Margaret Hayne Beattie will erect apartment and store building at North and Richardson Sts.; cost \$35,000; 70x105 ft.; 3 stories; stores on first floor; Martin & Ward, Archts.; W. A. Allison, Contr.

Tenn., Memphis—J. Zacks will erect apartment house at 236 N. Waldron Blvd.; cost about \$25,000; brick veneer; tile roof; 4 apartments of 4 rooms, bath and sleeping porch; Sieg & McDaniel, Archts.; J. A. Goodwin, Contr.

Tenn., Knoxville—Earl Worsham will erect apartment house at 1528 W. Cumberland Ave.; cost \$200,000; 85x125 ft.; 352,560 sq. ft.; 4 stories and basement; steel, concrete and metal lumber; built-up composition roof; concrete and hardwood floors; 4 automatic electric elevators, 1000 lb. each; interior tile; cast stone; Andrew J. Thomas, Archt., 137 E. 45th St.; Worsham Bros., Contrs.

Tenn., Nashville—Pritchett-Thomas Co. will erect Hillsboro Court Apts. on Hillsboro Rd.; cost \$130,000; 3 stories; 24 apartments of 3, 4 and 5 rooms; hardwood floors; tile baths and solariums; built-in beds; court, 68x78 ft.; garage of 16 compartments; Asmus & Clark, Archts.; G. B. Howard & Co., Contrs.

Tex., Corpus Christi—P. Vaky will erect apartment house at Chaparral and Taylor Sts.; cost about \$50,000; 100x150 ft.; 2 stories; 20 apartments; patio in rear; J. E. Walsh, Contr., Mission; separate contracts for plumbing, wiring, heating, etc.

Va., Norfolk—Dr. R. C. Hoge, Breckingham Corp., will erect apartment house at Brandon Ave. and W. Ghent Blvd.; cost \$140,000; 4 stories; brick and wood; gravel roof; hardwood floors; interior tile; 24

apartments of 5 and 6 rooms and porch; court; Phillip B. Moser, Archt.; C. C. Pierce, Contr., 529 Law Bldg.

Association and Fraternal.

Miss., Vicksburg—Mrs. J. W. Johnson will erect Young Men's Christian Assn. building at Clay and Monroe Sts., George M. Sudduth, Chrmn. Bldg. Comm.; face brick; 117x147 ft.; 3 stories; Underwood Contracting Corp., Contr., New Orleans; \$200,000 available.

Bank and Office.

Ala., Montgomery — Exchange National Bank will remodel building, install vaults, doors, safe deposit boxes, fixtures, etc.; cost about \$50,000; Frank Lockwood, Archt.; T. A. Monk, Contr.

Ala., Tuscaloosa—First National Bank will remodel building; new front; vaults by Mosler Safe Co., Hamilton, O.; Small-Brice Construction Co., Contr., Birmingham.

Fla., St. Petersburg—Central National Bank will remodel and erect addition to building at Central Ave. and 4th St.; cost \$65,000; 50x100 ft.; 2 stories; 20 offices; fireproof; steel; Barrett specification roof; hardwood floors; conduit system lighting; Otis elevator; Francis J. Kennard, Archt., Tampa; Holladay & Rountree, Contrs., St. Petersburg.

N. C., Greensboro—Jefferson Standard Life Insurance Co., Julian Price, Prest., will erect bank and office building at Elm and W. Market Sts.; cost \$2,000,000; 50x150 ft.; 17 stories; fireproof; steel, reinforced concrete, terra cotta and granite; 5 electric passenger and one freight elevators; 2 entrances; stores and bank on first floor over 300 offices above; 5 top floors used by company; vault, barber shop, heating and ventilating systems in basement; 2 lavatory and toilet rooms on each floor; cafeteria and rest rooms on top floor; Charles C. Hartman, Archt., Harry A. Hopp Interior Engr., New York; George A. Fuller Co., Contr., Munsey Bldg., Washington, D. C.

N. C., Lexington—Bank of Lexington will erect 2-story addition; cost \$20,000; 28x56 ft.; brick and wood; Barrett specification roof; tile and wood floors; Willard C. Northup, Archt.; Harbin Construction Co., Contr.

Tenn., Nashville—National Life & Accident Insurance Co. will erect building at Union St. and 7th Ave.; George C. Norton, Archt.; Foster & Creighton Co., Contr.

Tex., Port Arthur—Capt. W. C. Tyrrell, Beaumont, will erect L-shaped office and store building on Lake View Hotel site; cost \$125,000; 80x130 ft.; brick and steel; Barrett specification roof; concrete and hardwood floors; hollow fireproof and interior tile; metal ceilings; vaults; wire glass; vault lights; ventilators; electric elevators; Dunham 2-pipe gravity return system of heat; city lights; store on first floor, 25 offices on each floor above; W. F. Steinman & Son, Archts., Box 65; McDaniel & Hartford, Contrs., both Beaumont.

Tex., Terrell—American National Bank will remodel building and erect 1-story addition for offices; cost \$50,000; W. H. Holyman, Contr.

Va., Galax—First National Bank will erect building; cost \$70,000; 30x130 ft.; 3 stories; brick and terra cotta; Barrett built-up roof or equal; concrete, hardwood, cork tile floors; steam or hot water heat; ornamental terra cotta; metal doors; vaults; H. M. Miller, Archt., Roanoke; C. D. Martin, Contr., Galax.

Va., Richmond—Broadway National Bank will erect addition to and alter building at Main and 15th Sts.; cost \$75,000; prepared roofing; marble floors; steam heat; electric lights; Carneal & Johnston, Archts.; W. L. Ragland & Son, Contrs.

Va., Richmond—Richmond Trust Co., John Skelton Williams, Chrmn. of Board, will erect bank and office building at Main and 7th Sts.; cost \$800,000; 7 stories; steel frame; granite, limestone, concrete and brick; slag roof; concrete, hardwood, marble and terrazzo floors; hollow fireproof and interior tile; ornamental terra cotta; metal doors; vaults; mail chutes; vault lights; steel sash and trim; Starrett & Van Vleck, Archts., S. W. 40th St., New York; John T. Wilson Co., Inc., Contr., Richmond.

Churches.

Ky., Cattertsburg—First Christian Church, Rev. D. H. Matherly, Pastor, will erect building; Carl Moore, Contr.

N. C., Kannapolis—First Baptist Church will erect addition; cost \$20,000; main auditorium 30x60 ft.; brick; slate roof; hardwood floors; rolling partitions; ventilators; hot air heat; electric lights; Brown & Bryant, Archts.-Contrs.

Md., Baltimore—St. Paul's Evangelical Lutheran Church, Baker & Longwood Sts., Rev. Phillip A. Heilman, Pastor, will erect stone building; cost about \$50,000; Clyde N. & Nelson Friz, Archts., Lexington Bldg.; B. F. Bennett Bldg. Co., Contr., 123 S. Howard Street.

Mo., Kansas City—Keneseth Israel Temple will complete temple at 34th St. and the Paseo; cost about \$175,000; school in basement; Selby H. Kurfiss, Archt.; Hoffman Construction Co., Contr.

Mo., St. Thomas—Catholic Church will erect parsonage; Leuthen Bros., Jefferson City, contrs. at \$14,000.

Mo., Springfield—Grace Methodist Church will complete building at Jefferson and Cherry Sts.; Heckenlively & Mark, Archts.; G. F. Hentchel, Aurora, contr. at \$71,734; bids for electric-action pipe organ to cost about \$47,000 are being received by H. A. Nelson, Springfield.

S. C., Seneca—Baptist Church will erect Sunday school room; 26x40 ft.; 9 class rooms; contract let.

S. C., Spartanburg — Prospect Baptist Church, C. G. Dorman, Chrmn. Bldg. Comm., Campobello, will erect \$20,000 building; L. D. Proffitt, Archt.; contract let.

Tex., San Antonio—St. Johns Lutheran Church will erect building on S. Presa St.; cost \$40,000; 45x90 ft.; brick and concrete; gravel roof; cement floors; C. V. Seutter, Archt., Moore Bldg.; Andy Vogel, Contr., 115 Arcadia Pl.

Va., Covington—First Presbyterian Church will erect building at Maple Ave. and Locust St.; cost about \$100,000; Nevin, Wischmeyer & Morgan, Archts., Louisville, Ky.; Harrison Construction Co., Contr., Petersburg, Va.

Va., Graham—Baptist Church will erect building; cost about \$5,000; 2 stories and basement; brick; Herbert L. Cain, Archt., 12 N. 9th St., Richmond; Leedy & Barnett, Contrs., Graham.

City and County.

Mo., Kansas City—Clubhouse—Board of

Park Commission, T. C. Harrington, Secy., will erect clubhouse at Swope Park; 1 story and basement; 66x118 ft.; Shephard & Wisner, Archts., R. A. Long Bldg., Kansas City; Rand Construction Co., Concordia, Kans., contr. at \$36,057.

Tenn., Chattanooga—Auditorium—City. Z. W. Wheland, Chrmn. Auditorium Comm., will erect Soldier's and Sailors' Memorial Auditorium; 157x287 ft.; steel frame and reinforced concrete; asbestos shingles, gravel and built-up roof; cement and hardwood floors; low pressure steam heat; hand power baggage lift; R. H. Hunt Co., Archt., James Bldg.; Spike & Lose, Industrial Archt., Engrs., Atlanta, Ga.; Parks & Co., Contrs. at \$404,402; Fred Cantrell Co., plumbing, lighting and heating, \$86,459; Chattanooga.

Courthouses.

N. C., Marion—Board of County Commrs. of McDowell County, J. Logan Lackey, Chrmn., will erect courthouse; 114x65 ft.; fireproof; 3 stories and basement; Erle G. Stillwell, Archt., Hendersonville; Southern Ferro Concrete Co., Atlanta, contrs. at \$124,500; marble, S. J. Bean, Asheville, \$5135; plumbing, Southern Plumbing Co., Winston-Salem, \$8550; heating, \$6793, and electric work, \$3955, J. L. Powers, Bennettsville, S. C.

Dwellings.

Ark., Pine Bluff—Mrs. P. F. Crutcher will erect bungalow at 317 W. Harding Ave.; cost \$12,500; 2 stories; brick veneer; contract let.

Fla., Palm Beach—Miss Alice Delmar will erect residence in Ocean Vista, south; cost \$30,000; C. C. Lightbown, Contr.

Fla., Palm Beach—C. C. Lightbown, Contr., has permit to erect \$15,000 residence in Ocean Vista south.

Fla., Tampa—Frank Bentley, Jr., will erect residence on Bayshore Blvd.; cost \$14,000; Spanish design; stucco tile roof; iron balconies; Frank J. Wynn, Archt.; J. S. Bradbury, Contr.

Fla., Miami—William Whitman will erect buildings for Spanish colony; 6 dwellings to be erected at once; Hampton & Reinert, Archts.; Wade & Son, Contrs., Coconut Grove.

Ga., Atlanta—A. J. Burkes will erect duplex dwelling at 329 Virginia Ave.; cost \$10,500; 2 stories; brick; T. James, Contr.

Ga., Augusta—H. H. Alexander will erect 3 dwellings on Metcalf St. between Walton Way and Hickie St.; cost \$3500 each; frame; F. P. Branch, Contr.

Ga., Macon—G. Clisby Clarke will erect residence at Clayton and Callaway Sts., Vineville; cost \$15,000; Happ & Shelverton, Archts.; E. J. Arnold, Contr.

Ky., Paducah—Fred Speck will erect residence at Lang Park and Fountain Ave.; hollow rock tile and stucco; Italian design; tile roof; D. Harry Jamieson, Archt.; W. F. Owens, Contr.

La., New Orleans—Eureka Homestead Society will erect dwelling, Magazine and Camp Sts.; cost \$10,907; H. A. Lagasse Co., Contr.; also dwelling, Baronne and Dryades Sts.; cost \$10,761; John F. Charlton, Contr.

La., New Orleans—Alvin H. Lochte will erect dwelling at Neron and Fern Sts.; 2 stories; cost \$15,000; Jones & Roessle, Contrs.

La., New Orleans—Samuel Sternberg, Suburban Building & Loan Assn., will erect duplex dwelling at Calhoun and Peters Sts.; cost \$10,200; 2 stories; Paul G. Charbonnet, Contr.

Md., Baltimore—Roland Park Co., 404-10 Roland Ave., will erect 5 dwellings on Wendover Rd. near Northway, Guilford; 2½ stories;

cost about \$13,000 each; 29.6x32 ft.; brick, stone, hollow tile and stucco; slate roofs; concrete, hardwood and pine floors; hollow fireproof and interior tile; hot water heat; Howard Sill, Archt., 12 E. Pleasant St.; Gladfelter & Chambers, Contrs., 36th St. and Roland Ave.

Md., Baltimore—James D. Hull, Beechfield Ave., Catonsville, will erect dwelling and garage at 2603 Lyndhurst Ave.; cost \$12,000; 2½ stories; frame; 40x34 ft.; Wm. H. Vail, Archt.-Contr., 3600 Duval Ave.

Md., Baltimore—Edward Apsley, Inc., 4201 Harford Ave., will erect dwelling Halcyon Park Dr., west of Eloise Ave.; 2 stories; frame; 26x28 ft.; George Schnader, Contr.; also 2 dwellings, Southern Ave., east of Edna Ave.; 1½ stories; frame; 26x28 ft.; steam heat; construction by owner; total cost \$10,000.

Md., Baltimore—John H. Coon, Boulevard Theatre, will erect residence and garage, Norwood Rd. near Highfield St., Guilford; cost \$12,000; 2½ stories; brick; 24.10x43.10 ft.; slate roof; hot water heat; Edward L. Palmer, Archt., 513 N. Charles St.; Edward G. Turner, Contr., 15 E. Fayette St.

Md., Baltimore—Mary A. Federline will erect dwellings at 3800-32 Old Frederick Rd.; cost \$15,000; 14x28 ft.; 2 stories; brick; George Wessel, Archt., 2752 Winchester St.; John Federline, Contr.

Md., Baltimore—William F. Breeback, 642 W. Franklin St., will erect residence on St. Paul St. near Millbrook Rd.; cost \$15,000; 2½ stories; brick and stone; 44x38.6 ft.; slate roof; steam heat; W. W. Emmart, Archt., 1101 Union Trust Bldg.; R. B. Mason, Contr., 308 W. Madison St.

Md., Baltimore—Hugh Gamse, 1655 Monroe St., will erect 2½-story dwelling at 3807 Chatham Rd.; cost \$12,000; 28.6x33.11 ft.; slate roof; concrete block; Rich Brockeyer, Archt.; George Schnader, Contr., 115 N. Chester St.

Md., Baltimore—Bruce Naylor, Cambridge Apts., will erect residence and garage on Overhill Rd. near Charles St., Guilford; 2½ stories; stone; 40x36 ft.; slate roof; 8 rooms and 4 baths; Edward L. Palmer, Jr., Archt., 513 N. Charles St.; Gladfelter & Chambers, Contrs., 36th St. and Roland Ave.

Md., Baltimore—Roland Park Co., will erect 5 dwellings on Juniper Rd. near 39th St.; cost \$9000 each; 2½ stories; four, 35.10x22.4 and one, 34.6x34.8 ft.; terra cotta tile stuccoed; slate roofs; hot water heat; Edward L. Palmer, Jr., Archt., 513 N. Charles St.; Hicks, Tase & Norris, Contrs., 106 W. Madison St.

Md., Baltimore—Park Heights Manor Development Co. will erect 9 dwellings on Ethelbert Ave. near Midwood Ave. and 11 on Wimmer St. near Linwood, Rockwood and Manhattan Aves.; cost about \$45,000; 24x28 ft. and 26x32 ft.; 1½ and 2 stories; frame; Allied Construction Co., Contr.

Mo., Columbia—Miss Anna Baumgartner will erect residence; cost \$10,000; Davis & Phillips Contracting Co., Contr.

Mo., Columbia—C. B. Phillips will erect residence; cost \$10,000; Davis & Phillips Contracting Co., Contr.

Mo., Columbia—R. W. Selvidge will erect residence; cost \$10,000; Davis & Phillips Contracting Co., Contr.

N. C., Gastonia—John Petches will erect residence on South St.; Plyer Bros., Contrs. S. C., Chester—Purity Presbyterian Church will erect manse; cost \$11,998; 9 rooms; brick; slate roof; hardwood floors; electric lights; Alfred D. Gilchrist, Archt.; R. L. Clemmer, Contr., 118 Lancaster St.; Chester Plumbing Co., heating and plumbing.

S. C., Columbia—W. H. Henderson will

erect residence at Shandon; cost \$22,500; stucco on metal lath; Robert Eisenschmidt, Archt.; J. Heslep, Contr.

S. C., York—W. L. Wallace will erect residence on E. Liberty St.; Broadus M. Love, Contr.

Tex., Galveston—Adrian F. Levy will erect residence on Ave. O near 31st St.; cost \$17,500; hollow tile and concrete; asbestos roof; 10 rooms; L. S. Evans, Archt.; Brown Bros., Contrs.

Tex., San Antonio—Dr. J. S. Steele will erect dwelling on Shook Ave.; cost \$13,000; frame and stucco; Moeller & Weilbacher, Contrs.

Tex., San Antonio—Everett Love will erect residence on Linwood Blvd., Monte Vista; cost about \$42,000; Italian architecture; stucco, concrete and hollow tile; tile roof; terrace and steps; tile and hardwood floors; hot water heat; vacuum cleaner and refrigerating system; stucco, tile and stone garage with servants' rooms and bath; Adams & Adams, Archts.; James Alken, Contr.

Va., Portsmouth—P. G. Blanford will erect dwelling on Naval St. near Riverview; cost \$10,000; 2 stories; brick; Calvin Johnson & Son, Contrs.

Va., Portsmouth—W. B. Seeley will erect dwelling in Meadowbrook; cost \$11,000; brick; 6 rooms; J. W. Saunders, Contr.

Va., Portsmouth—L. T. Van Patton will erect residence in Algonquin; cost \$16,000; 2 stories; Meredith Bros. Construction Co., Contr.

Va., Portsmouth—J. D. Wales, Sr., will erect residence in Algonquin Park; cost \$14,000; brick; 7 rooms; J. W. Saunders, Contr.

Government and State.

Tenn., Greenville—Memorial—Andrew Jackson Memorial Coman. will erect building; cost about \$10,000; marble, brick and glass; Barber & McMurray, Archts., Knoxville; Price, Taylor & Jolly, Contrs., Greenville.

Hotels.

Ga., Augusta—Bon Air Hotel Corp. will rebuild hotel; cost \$800,000; 300 rooms and baths; fireproof; concrete, stucco and tile; terrazzo floors; tile baths; tile terraces; composition roof; elevators; Willis Irvin, Lamar Bldg., Augusta, and McKim, Mead & White, 101 Park Ave., New York, Assoc. Archts.; Foundation Co., Contr., 120 Liberty St., New York.

Ga., Macon—Murphy, Taylor & Ellis and Jesse B. Hart will rebuild Brown House; 90 rooms; stores on first floor; R. H. Smallings & Sons, Contrs.

N. C., Rutherfordton—S. B. Tanner, Prop., Iso-Thermal Hotel, will erect hotel; cost \$75,000; 3 stories and basement; 120x42 ft., with wing, 68x42 ft.; 48 bedrooms; fireproof; elevator; Oliver Hill and M. L. Justice, Contrs.

W. Va., Welch—Carter Hotel Co., S. E. Carter and others, will erect hotel; cost \$150,000; 72x85 ft.; 5 stories and basement; 103 rooms; steel frame; brick, hollow fireproof interior tile; Bedford stone trim; Barrett built-up roof; reinforced concrete floors over steel joists, probably composition finish; metal ceilings; wire glass; elevators; vault lights; ventilators; Garry & Sheffey, Archts., Box 411, Bluefield; Green & Stowe, Contrs., Welch.

Miscellaneous.

Md., Baltimore—Arena—Jno. J. Carlin, 2528 Keyworth Ave., will erect roof over arena at Carlin's Park, Liberty Heights Ave. and Western Maryland R. R.; cost \$10,000; 150x163 ft.; structural steel; Stanislaus Rus-

sell, Archt., 11 E. Lexington St.; Curtis Bay Copper & Iron Works, Contr.

Md., Baltimore—Bowling Alleys—Regent Realty Co., Eutaw and Franklin Sts., will remodel Playhouse, 315-19 N. Eutaw St. for bowling alleys; cost \$50,000; J. Henry Miller, Inc., Contr., Eutaw and Franklin Sts.

Mo., Kansas City—Home—Pallas Holding Co., Chas. J. Schmelzer, Prest., will erect building at 10th and Garfield Ave. for Priests of Pallas; cost \$28,000; brick; Pratt-Thompson Constr. Co., Contr.

Tex., Fort Worth—Bathhouse—River Crest Country Club will erect wading pool, 15x30 ft.; main pool, 40x100 ft.; bathhouse, 22x80 ft.; cost \$33,000; reinforced concrete and tile; Jos. R. Pelich, Archt., W. T. Waggoner Bldg.; W. C. Hedrick, Contr., Fort Worth Natl. Bank Bldg.

Schools.

Fla., Jacksonville—Duval County Board of Public Instruction, Dr. Fons A. Hathaway, Supt., will erect addition to Davis Street School; 2 wings; 40x150 ft. each; 2 stories; brick; composition shingle roof; wood floors; Mark & Sheftall, Archts., 210 Clark Bldg.; W. T. Hadlow, contr. at \$46,831; Hooker & Lightbody Co., steam heating and plumbing, \$9389.

Ga., Atlanta—Board of Trustees, Dr. Marion McH. Hull, Prest., will erect addition to North Avenue Presbyterian School, 209 Ponce de Leon Ave.; cost \$100,000; 2 stories; brick; 8 classrooms, auditorium, gymnasium and offices; Chas. H. Hopson, Archt.; J. W. Jenkins, Contr., Grant Bldg.

Ga., Reidsville—Tattnall County Board of Education will erect school in Cedar Haw Consolidated Dist.; cost \$10,000; brick; Jno. T. Ragan & Co., Contrs., Vidalia.

Ky., Madisonville—School Board, F. B. Arnold, Secy., will erect high school; 2 stories and basement; 10 classrooms, auditorium and gymnasium; brick; Clifford Shoppell & Co., Archts., Furniture Bldg., Evansville, Ind.; Sublett & Hafner, Owensboro, contrs. at \$65,951; R. M. Brooks, Madisonville, plumbing, \$5225; J. E. Woolsey & Sons, Evansville, heating, \$6465.

La., Ethel—East Feliciana Parish School Board, Clinton, will erect high school; cost \$40,000; Knapp & East, Contrs., Lake Charles.

Mo., Columbia—Stephens College Board of Trustees will erect dormitory; cost \$110,000; 48x174 ft.; brick and hollow fireproof tile; slate roof; hardwood and concrete floors; passenger elevator, \$2500; Jamieson & Spearl, Archts., Arcade Bldg., St. Louis; Phillips & Davis, Contrs., Columbia.

Mo., St. Louis—St. Louis University School of Dentistry will erect building at Caroline St. and Grand Ave.; cost \$200,000; Gothic design; 100x100 ft.; 3 stories; reinforced concrete and brick; stone trim; clinic containing 137 chairs, offices, extracting and examination rooms, rest rooms on first floor; laboratories and classrooms on second and third floors; Widmer Engineering Co., Archt.-Contr.

N. C., Cullowhee—Cullowhee Normal & Industrial School, R. L. Madison, Prest.,

will erect dormitory; cost \$100,000; 60x236 ft.; fireproof; steel frame; metal lumber; face brick; Spanish tile roof; oak and concrete floors; interior tile; ornamental terra cotta; metal doors; ventilators; vapor steam heat; G. Murray Nelson and Thos. W. Cooper, Archts.; H. A. Underwood, Engr., Joint Bldg. Comsn.; McElwee & Hester, Contrs., all Commercial Bank Bldg., Raleigh.

N. C., Henderson—Board of Trustees, Henderson Graded Schools, Prof. J. T. Alderman, Supt., will erect 3 schools; 8 classrooms and combination auditorium-gymnasium; fireproof; built-up roof; hollow fireproof tile; wood floors over concrete; plaster board; wire glass; steel sash and trim; ventilators; steam heat; Jas. A. Salter, Archt., Raleigh; W. F. Hayes & Son, Contrs.

Tenn., Blue Grass (R. D. from Concord)—County Board of Education, Knoxville, will erect high school; cost \$13,844; 2 stories; 6 classrooms, assembly and recitation hall, manual training and domestic science departments; Manley & Young, Archts.; Smith & Goolsby, Contrs., both Knoxville.

Tenn., Chattanooga—Hamilton County Board of Education, Jas. A. Roberts, Supt., will erect annex to Central High School; auditorium to seat 1500, and 6 classrooms; J. D. Alsop, Archt., James Bldg.; Wilson & Co., contrs. at \$42,559.

Tex., Dallas—Board of Education will erect Sunset and Rosemont schools in Oak Cliff, Silberstein School in South Dallas and Booker T. Washington High School for negroes; each building to have 21 rooms, auditorium, lunch room, principal's office and teachers' rest room; Hughes & O'Rourke, contrs. at \$370,036; Hamilton Co., heating and plumbing, \$55,962; Superior Electric Co., electric wiring, \$2965.

Va., Chincoteague—Board of Education, W. J. Matthews, Clk., will erect grade school; cost \$40,000; 115x112 ft.; 2 stories and basement; brick and frame; slag roof; hardwood and concrete floors; metal doors; steel sash and trim; ventilators; steam heat; city lights; Benton & Bengston, Archts., 4 S. 10th St., Richmond; Eastern Shore Construction Co., Contr., Salisbury, Md.

Va., Churchland—Norfolk County School Board, Jas. Hurst, Supt., Chamberlaine Bldg., Norfolk, will erect grade school; cost \$49,250; 2 stories and basement; 65x100 ft.; 8 rooms; semi-fireproof; brick; Chas. M. Robinson, Archt., Times-Dispatch Bldg., Richmond; Virginia Construction Co., Contr., Portsmouth.

Va., Danville—Riverside & Dan River Cotton Mill Corp. will erect school in village of Schoolfield; cost \$50,000; 2 stories; T. C. Thompson Bros., Contrs., Charlotte, N. C.

Va., Hickory—Norfolk County School Board, Jas. Hurst, Supt., Chamberlaine Bldg., Norfolk, will erect grade school; 2 stories and basement; 54x72 ft.; 8 rooms; brick; Chas. M. Robinson, Archt., Times Dispatch Bldg., Richmond; B. F. Wentz, Contr., R. F. D., Norfolk.

Va., Norview—Norfolk County Board of Education, Portsmouth, will erect schools in Norview and Bay View, Tanners Creek Dist.; cost \$89,800 and \$46,800; 12 and 8 rooms;

brick and concrete; Gooch Williams & Co., Contrs., Norfolk.

Va., West Norfolk—Norfolk County Board of Education, Jas. Hurst, Prest., Chamberlaine Bldg., Norfolk, will erect school; cost \$21,617; American Construction Co., Contr., Norfolk.

W. Va., Fairmont—City Board of Education, Mary M. DeBolt, Secy., will erect high school gymnasium; R. A. Gillis, Archt., Fleming Bldg.; C. E. Minor, contr. at \$26,429; J. Guy Hawkins, plumbing, \$4800; W. A. Weidebusch, heating; Case Electric Co., electric work.

W. Va., Springhill—Jefferson District Board of Education will erect school; cost \$11,435; 2 stories; brick; J. T. McDaniel, Contr.

Stores.

Fla., Palm Beach—Martha Bellamy will erect business building on Rosemary St.; cost \$12,000; H. A. Augustus, Contr.

Fla., Tampa—E. M. Bergman will erect store and office building; 2 stories; 70x70 ft.; brick and tile; composition roof; M. Leo Elliott, Archt., 418 Citizens Bank Bldg.; A. M. Snow, Contr., at \$19,500.

La., New Orleans—D. H. Holmes Co., Ltd., will expend \$10,000 to remodel building at Iberville and Bourbon Sts.; Geo. J. Glover, Contr.

La., New Orleans—O. Van Horn will erect business building at Camp and Poydras Sts.; cost \$70,000; Doullut & Williams, Contrs.

Mo., Carthage—Carthage Cash Mercantile Co., will erect business building; cost \$20,000; James Logan & Co., Contrs.

Mo., Chillicothe—Switzer Adams Co. will erect store on S. Locust St.; 1 story and basement; brick and stone; R. Warren Roberts, Archt., 719½ Webster St.; A. H. Huggett, Contr.

S. C., Union—J. B. Foster will erect 3 store rooms; contract let.

Va., Portsmouth—C. W. Walker Estate will erect store and office building at High and Dinwiddie Sts.; cost \$10,500; 2 stories; brick; Virginia Construction Co., Contr.

Tenn., Loudon—Loudon Development Co. will erect bldg. for stores, offices and apartments; 101x65 ft.; brick; hardwood floors; tar and gravel roof; ornamental terra cotta; steam heat; electric lights; ventilators; Manley & Young, Archts., Knoxville; R. M. Calloway, Contr., Lenoir City.

Warehouses.

Fla., Tampa—Dixie Candy Co. will erect warehouse; 30x98 ft.; W. H. Gilmartin, Contr.

Ga., Atlanta—Southern Construction & Supply Co. will erect building for warehouse, assembly shop and offices; cost \$25,000; 114x109 ft.; 2 stories; brick and steel; slag roof; concrete floors; steam heat; electric lights; plans by owner; Barge-Thompson Co., Contr.

Tex., Dallas—Ralph Briggs and R. H. Parks will erect automobile warehouse at 512-14 Jackson St.; cost \$35,000; 3 stories; brick and concrete; Rupert Slaughter, Contr.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Blowers and Pumps.—R. A. Zoeller, Box 474, Washington, N. C.—Prices and catalogues on blowers and power pumps to be used in connection with cotton presses.

Boilers.—Non-Acid Fertilizer & Chemical Co., Lakeland, Fla.—Prices on boilers for plant with yearly capacity, 50,000 tons phosphate and fertilizer.

Brick.—E. Homer Tiley Chrmn. Bldg. Comm., First Baptist Church, Box 915, Teague, Tex.—Gray pressed brick for church 95x72 ft.

Bridge Construction.—Mobile County, Bd. of Revenue and Road Commrs., Thos. B. Allman, Clk., Mobile, Ala.—Bids opened May 22 to build 300-ft. bridge over Chickasabogue

Creek; 48 tons (six 50-ft. span) steel bridging; 3 tons steel reinforcing; plans, etc., from L. E. Prouty, County Highway Engr., Mobile.

Bridge Construction.—City, Bd. of Awards, Wm. F. Broening, Prest., Baltimore, Md.—Bids until June 7 to build 558-ft. Phoenix Bridge and approaches over Gunpowder Riv-

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ton. Plant Engr.

Bridge Construction.—Noxubee County, Board of Supvrs. Jno. A. Tyson, Chancery Clk., Macon, Miss.—Bids until June 6 to build steel and concrete bridge over Hashagua Creek on Macon and Louisville road, 8 mi. west of Macon; Nos. 145 and 146; plans, etc., on file.

Bridge Construction.—Richland-Calhoun Bridge Comsn., Wateree, S. C.—Bids until May 25 to build 600-ft. highway bridge across Bates Old River; 6000 lin. ft. creosoted piling; 25,000 ft. creosoted lumber; 40,000 ft. plain lumber; plans, etc., on file.

Bridge Construction.—North Carolina State Highway Comsn., Highway Comsn., Raleigh, N. C.—Bids until June 28 on following project:

No. 264—Craven-Pamlico Counties, bridge over Broad Creek; Route No. 301.

Bridge Construction.—Hinds County Bd. of Supvrs., W. S. Wells, Clk., Jackson, Miss.—Bids until June 1 to build creosoted pile bridge on Jackson and Terry Road, 1 mi. south of Byram; plans, etc., from Chancery Clk.

Bridge Construction.—State Highway Dept., Jefferson City, Mo.—Bids until May 26 to build bridge on State road from Ironton to Potosi; three 40-ft. reinforced concrete arch spans; spandrel filled; 18-ft. roadway; four 16-ft. reinforced concrete slab spans; 2 concrete piers; 4 concrete abutments; 20-ft. reinforced concrete slab span; 2 reinforced concrete abutments; 18-ft. roadway; 24-ft. reinforced concrete deck girder span; 2 reinforced concrete abutments; 19-ft. roadway; Iron County, Federal Aid Project No. 107, Section A; H. D. Griffith, Div. Engr., De Soto, Mo.

Bridge Construction.—Adams County, Board of Supvrs., F. V. Elsele, Clk., Natchez, Miss.—Bids until June 5 to build wooden bridge over Clear Creek, on Washington-Leesdale road; plans, etc., on file.

Bridge Construction.—Nodaway County, Fred. W. Smith, County Clk., Maryville, Mo.—Bids opened May 22 to build bridge on Sheridan road, 2 mi. north of Parnell.

Bridge Construction.—State Road Comsn., Charleston, W. Va.—Bids until June 6 on following projects:

3055—Mason County, Bridges 795 and 796 80-ft. span, steel deck truss each; superstructure.

3011—Hampshire County, Bridge No. 803, Mechanicsburg Gap; 130-foot span steel truss; concrete substructure; plans, etc., on file or from Div. Engr.

Bucket (Clam Shell).—Duncan Machinery Co., Dempster Bldg., 721 N. Central Ave., Knoxville, Tenn.—Dealers' prices on ¾-yd. clam shell bucket, immediate shipment; second-hand or rebuilt; state location, description, etc.

Building Material.—J. C. Wev, Bernice, La.—Lime, cement, plaster, structural steel and white cement for school at Sicily Island; cost \$53,300; 2 stories and basement; 56x 98 ft.

Cars (Dump).—Duncan Mch. Co., Dempster Bldg., 721 N. Central Ave., Knoxville, Tenn.—Dealers' prices on twelve 36-in. gauge, 4 yd., two-way dump cars, immediate shipment; state condition, location, name of maker, etc.

Cement, etc.—Marine Corps Quartermaster's Dept., Washington, D. C.—Bids until May 26 to furnish 550 bbls. Portland cement; 1170 sheets galvanized steel roofing, corrugated; 550 lin. ft. ridge roll; 500 lbs. G. I. roofing nails and 250 lbs. lead washers,

for Brigade Quartermaster, 1st Brigade, Port au Prince, Haiti; delivery Hampton Roads, Va.; Sch. 362; information on application.

Cement.—J. C. Wev, Bernice, La.—Cement. See Building Material.

Cement Mill Machinery.—R. T. Miller, Secy., Hermitage Portland Cement Co., 174—3rd Ave., North, Nashville, Tenn.—Bids until July 1 on \$1,000,000 cement mill mch.

Chairs.—Lincoln Memorial Comsn. Executive Office, 1729 New York Ave., Washington, D. C.—Bids until May 22 to rent folding chairs for use at dedication of Lincoln Memorial May 30; further information on application.

Coal.—Joseph W. Power, Secy., Board of Contracts, Jackson, Miss.—Bids until June 5 to supply coal for several State Institutions from June 5, 1922, to June 1, 1923; 3500 tons for Insane Hospital, delivered at asylum spur track; 3000 tons for East Mississippi Insane Hospital, delivered at nearest depot in Meridian; 600 tons for new capitol; 200 tons for old capitol; 400 tons for Deaf and Dumb Institute; 300 tons for Blind Institute; 300 tons for State Charity Hospital; No. 2 lump and mine run.

Concrete Mixer, etc.—Brown-Harry Co., Gastonia, N. C.—To buy or rent half-yard concrete mixer, hoisting and distributing power or mixer, broom and bucket distributor; second-hand equipment.

Concrete Mixer.—See Paving Equipment.

Conveyors.—Robert W. Hunt Co., 175 W. Jackson Blvd., Chicago, Ill.—Conveyors for 200 ton daily capacity salt mine.

Cotton Dusting Machines.—Geo. H. Hayes, care of Bradstreet's, Atlanta, Ga.—To correspond with mfrs. of cotton dusting machines.

Cotton Goods.—Marine Corps Quartermaster's Department, Washington, D. C.—Bids until May 29 to furnish 100,000 cotton undershirts; delivery Depot Quartermaster, Philadelphia, Pa.; Sch. 367; information obtainable from this office or at 1100 S. Broad St., Philadelphia.

Culverts.—See Paving Equipment.

Curb and Gutter Construction.—Town, Jas. B. Clark, Clk., Easton, Md.—Bids until June 12 to construct 3000 lin. ft. concrete curb and gutters; plans, etc., on file, or from E. G. Kastenhuber, Jr., Engr

Dehydration Machinery.—J. B. Miller, Tyler, Tex.—To correspond with mfrs. of machinery for dehydration purposes.

Doors (Roll up Steel).—Silver Spring Bldg. Supply Co., Silver Spring, Md.—To correspond with mfrs. of roll-up steel doors for use in warehouses.

Dredging, etc.—Treasury Dept., Supvg. Archt.'s Office, Washington, D. C.—Bids until June 14 to construct new piers and dredging for U. S. Quarantine Station at Rosebank, Staten Island, N. Y.; plans on file or with Chief Engr., 731 Custom House Bldg., New York.

Drill Press.—Claussen Lock & Safe Co., 616 Market St., San Antonio, Tex.—Prices on drill press.

Electric Equipment.—Charles Harris, Box 72, Bunnell, Fla.—Prices on generator and switch board.

Electrical Equipment.—Walter H. Taylor, III, Director Public Works, Norfolk, Va.—Bids opened May 24 to furnish conduits,

wiring, etc., and erect switchboard equipment for 3 synchronous motors, lighting, etc.; information on application.

Electrical Equipment.—J. M. Thompson, City Clerk, Germantown, Tenn.—Prices on 37½ K. V. A. A. C., 3 phase, 60 cycle, 2300 volt generator, 1200 R. P. M. excitor and switchboard; can use second hand generator, etc.

Electric Light System, etc.—Treasury Department, Supvg. Archt.'s Office, Washington, D. C.—Bids until June 15 for electric light, power and telephone systems at U. S. V. H., at Whipple Barracks, Prescott, Ariz.; plans on file or with Supt. of Construction at Prescott.

Elevators (Passenger).—Treasury Dept., Supvg. Archt.'s Office, Washington, D. C.—Bids until May 31 to install complete 2 full magnet control electric passenger elevators for U. S. V. Hospital No. 24, Palo Alto, Cal.; plans on file.

Engines.—Non-Acid Fertilizer & Chemical Co., Lakeland, Fla.—Prices on engines for plant with yearly capacity of 50,000 tons phosphate and fertilizer.

Engines (Oil).—Charles Harris, Box 72, Bunnell, Fla.—Prices on complete outfit oil engine, generator and switchboard.

Engines (Oil).—Robert W. Hunt Co., 175 W. Jackson Blvd., Chicago, Ill.—Oil engines for 200 ton daily capacity salt mines.

Farm Machinery, etc.—Wayne G. McGowan, County Agt., Abbeville, S. C.—Farm mch. and supplies.

Fertilizer Equipment.—Non-Acid Fertilizer & Chemical Co., Lakeland, Fla.—Prices on dryers, tanks, storage and agitator, mixing plant for plant with yearly capacity of 50,000 tons non-acid phosphate and fertilizer.

Generators (Acetylene).—Dr. B. J. Baldwin, Verbena, Ala.—Data and prices on acetylene generators for country houses.

Generator and Burner.—J. C. Reynolds, 519 Center St., Owensboro, Ky.—To purchase gas generator and burner for tobacco curing plant.

Generating Sets.—F. B. Cole, Newnan, Ga.—Engine and dynamo, 3 phase, 60 cycle, 550 volts, 300 to 400 K. W.; directed connected preferred; also one 75 to 80 direct connected unit, same voltage.

Generating Sets.—See Engines Oil.

Gin Outfit.—R. A. Zoeller, Box 474, Washington, N. C.—Prices on three 70 or 80 saw system gin outfit with lint blower instead of brushes, new or second.

Grinder (Electric).—Claussen Lock & Safe Co., 616 Market St., San Antonio, Tex.—Electric grinder.

Gravel, etc.—City of Humboldt, Tenn., W. E. Durap, Mayor.—Bids until May 27 to furnish approx. 4000 tons pit run gravel, 200 tons screened gravel, f. o. b. cars at gravel pit; for scarifying 40,000 sq. yds. of gravel streets, unloading, hauling, spreading and rolling, 6000 tons gravel; plans on file or with J. H. Weatherford, Engr., 64 Porter Bldg., Memphis, Tenn.

Hardware, etc.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids until May 23 to furnish miscellaneous hardware; delivery Depot Quartermaster, U. S. M. C., Philadelphia, Pa.; Sch. 359; plans on file or at 1100 S. Broad St., Philadelphia.

Heating Plant.—E. Homer Tirey, Chrmn., Bldg. Comm., First Baptist Church, Box 915, Teague, Tex.—Heating plant.

Heating and Ventilating.—Ed. of Awards, Mayor, Wm. F. Broening, Prest., City Hall, Baltimore, Md.—Duplicate bids until May

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31 at office Richard Gwinn, City Register, City Hall, for heating and ventilating in schools Nos. 25, 67, 72 and 80; plans and specifications at office J. F. Crowther, Inspector of Buildings, City Hall.

Horse Cinchas and Dump Carts.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids until June 2 to furnish 400 horse cinchas and 4 dump carts delivery, Depot Quartermaster, Philadelphia, Pa.; Sch. 372; information obtainable from Room 3207, Navy Bldg., Washington, or 1100 S. Broad St. Philadelphia.

I-Beams (Metal), etc.—W. P. Law, Darlington, S. C.—To purchase metal I-beams, metal laths, etc.; prefer nearby mfrs.

Ice Making Machinery.—Greenwood Agency Corp., W. S. Barry, Prest., Greenwood, Miss.—To purchase 20 to 50-ton capacity ice-making machinery, making ice from raw water; correspond with mfrs.

Leveling Block.—Chas. T. Lerman, 2300 Ave. A, Birmingham, Ala.—Leveling block 8x30x3-in.

Lighting Equipment, etc.—Escambia County Comms., L. S. Gilmore, Chrmn., Pensacola, Fla.—Bids until May 30 and furnish and install certain wiring and lighting equipment on County lift bridge over Bayou Chico; plans with Jas. Macgibbon, Clk., Circuit Court.

Locomotive.—Duncan Machinery Co., Dempster Bldg., 721 N. Central Ave., Knoxville, Tenn.—Dealer's prices on 12 to 20-ton, 36-in. gauge locomotive; immediate shipment; state condition, location, name of maker, etc.

Log Loader.—Central Lumber Co., Brookhaven, Miss.—Decker or McGiffert log loader for 3-ft. narrow gauge track; state price, condition and specifications.

Lumber.—E. Homer Tirey, Chrmn., Bldg. Comm., First Baptist Church, Box 915, Teague, Tex.—Lumber for church bldg.

Mechanical Equipment, etc.—Treasury Department, Supvg. Archt.'s Office, Washington, D. C.—Bids until June 9 for mechanical equipment, improvement to power house and additional barracks at U. S. Quarantine Station, Gallops Island, Boston, Mass.; plans on file or with Chief Engr., Room 437, Post Office Bldg., Boston.

Metal Stamping and Branding.—S. Louis Bode, Secy., Bode-Schneider & Co., 912 Twiggs St., Tampa, Fla.—Metal stamping and branding equipment.

Miscellaneous Supplies.—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Bids until May 25 to furnish: Alfalfa hay; oats; refrigerating equipment; caskets; fuses; lamp cord and garbage pails. Blank forms and information (Circular 2292) on application to office of Panama Canal; Asst. Purchasing Agt. at Fort Mason, San Francisco.

Miscellaneous Supplies.—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Bids until June 2 to furnish: Motor tractor lawn mowers; dynamo-meters; cotton-battling; milled toilet soap; bicycle tires (single tube); fiber key tags; celluloid card cases, unsensitized blueprint and brown-print paper. Blank forms and information (Circular 2293) on application to offices of Panama Canal; Asst. Purchasing Agt. at Fort Mason, San Francisco, Cal.

Motors.—R. A. Zoeller, Box 474, Washington, N. C.—Prices on 60 to 75 electric motors.

Ornaments, Buckles, etc.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids until May 31 to furnish 15,000 prs. gilt collar ornaments, 10,000 gilt cap ornaments, 30,000 trouser belt buckles, 30,000 trouser belt metal tips and 80,000 buckles and loops for Dungaree trousers; delivery to U. S. M.

C., 1100 S. Broad St., Philadelphia, Pa.; Sch. 327; information obtainable from this office or Depot Quartermaster, Philadelphia.

Oxy-Acetylene Torch.—Claussen Lock & Safe Co., 616 Market St., San Antonio, Tex.—Oxy-acetylene torch.

Paving.—Chamber of Commerce, F. L. Whitman, Mgr., Newport, Ark.—Invites bids on paving business section of town; correspond with Engrs.

Paving.—City, Otto Boeckmeier, Clerk, St. Charles, Mo.—Bids, until May 29 to construct 3911 ft. sidewalk and 5570 lin. ft. curb and gutter on Clay St.; plans, etc., on file; P. W. Loonaaur, City Engr.

Paving.—City, Board of Public Service, St. Louis, Mo.—Bids until June 6 to improve Natural Bridge Ave. from Clara to Good-fellow Aves.; Newport Ave. from Walsh St. to Taft Ave.; Morgan Ford Road, from Gravois Ave. to Chippewa St.; and from Chippewa St. to Fyler Ave.; Clifton Ave. from Simpson to Bowman Aves.; plans, etc., from Prest., City Hall.

Paving.—City, J. W. Woodsley, Mayor, Union City, Tenn.—Bids until May 31 for paving: 31042 sq. yds. concrete, or 26,350 sq. yds. asphalt, asphaltic concrete, rock asphalt, or bitulithic paving on concrete, macadam, or telford foundation; 9540 lin. ft. curb and gutter, etc.; plans, etc., from W. D. Kaiser, Recorder, Union, or J. H. Weatherford, Engr., 64 Porter Bldg., Memphis, Tenn.

Paving.—City, S. H. Monger, Recorder, Lenoir City, Tenn.—Bids opened May 23 to pave, grade, curb and gutter Improvement Dists. Nos. 9, 10 and 11; Kingston or Bank St., from Broadway to Southern Ry. tracks; Depot Ave. from Kingston or Bank St. to B St. and B St. from Depot Ave. to Broadway; from Depot Ave. to intersection Kings-ton St.; plans, etc., on file.

Paving.—City, Z. L. Myers, Mayor, Georgetown, Ky.—Bids until May 26 to construct Main St. from east line of Water St. to west line Warrandale Ave.; Broadway St. from south line of Washington to North line of Colegel St.; plans, etc., from M. V. Offutt, Clk.

Paving.—Town, J. H. Crane, Town Clk., Mount Dora, Fla.—Bids until May 25 to construct 13,000 sq. yds. sheet asphalt, pavement, and 11,000 lin. ft. cement curb on following: Donnelly Ave., 2900 sq. yds. resurfacing; 7th Ave., 3520 sq. yds. pavement and 2640 lin. ft. curb; 6th Ave., 880 sq. yds. paving, 660 ft. curb; Baker St., 1760 sq. yds. paving, 1320 ft. curb; South Grandview Ave., 3520 sq. yds. paving, 3800 ft. curb; Clayton St., 1760 sq. yds. paving, 1320 ft. curb; North Grandview Ave., 2600 sq. yds. paving, 1800 ft. curb; plans, etc., on file.

Paving.—City, Luke C. Arnett, Clk., Fairmount, W. Va.—Bids until June 24 to pave Chicago St., between Quincy and Abbott Sts.; hill side brick on slag and sand base; plans, etc., from S. B. Miller, City Engr.

Paving.—Edd Wren, City Mgr., Riedsville, N. C.—Bids until June 13 for 50,000 yds. sheet asphalt, reinforced concrete or alternate types; 40,000 lin. ft. granite curb; 40,000 ft. of 2-in. concrete gutter or 40,000 yds. combination curb and gutter; 16,000 yds. 2 course sidewalks; plans obtainable from W. B. Kiker, City Engr.

Paving Equipment.—City, Jas. A. Tribble, Mayor, Forsyth, Ga.—Paving Equipment, including concrete mixer, concrete paving equipment, rock crushers, and culverts, for street and sidewalk improvement.

Paving Materials.—Jas. A. Tribble, Mayor, Forsyth, Ga.—Paving materials, including cement, sand, slag and stone for street and sidewalk improvement.

Paving Materials.—Wm. Martiny, County Judge, Johnson City, Tex.—Paving materials, including cement and sand, for road grading.

Pipe (Sewer).—City of Houston, Texas, Frank H. Owens, Chrmn.—Bids until June 1 to furnish 1680 ft. of 24-in. reinforced concrete pipe and 2150 ft. 8-in. vitrified clay sewer pipe; plans and specifications on file at office of City Engr., Engr. Bldg.

Pipe (Cast Iron).—City of Fairmont, W. Va., W. W. Conway, Mayor.—To purchase 600 ft. of 20-in. cast iron pipe for sewer work.

Pipe (Terra Cotta).—C. A. Futch, City Clk., Starke, Fla.—To correspond with mfrs. of 35 to 48-in. terra cotta pipe for storm sewers, etc.

Pipe (Water).—Temple Terraces, Inc., Citrus Exchange Bldg., Tampa, Fla.—Several thousand feet of second-hand galvanized pipe, ¾ to 4-in., and 6-in. cast iron pipe; good condition; state lowest prices per lin. ft. and best terms.

Planer and Matcher.—R. H. Etheredge, Esq., Luda, S. C.—6x12-in. planer and matcher with feed not less than 100 ft. per minute, 4-side machine fitted with blower system; second-hand; state price, etc.

Plumbing.—Chas. R. Burgess, Russellville, Ala.—Toilet and bath tub supplies.

Power Plant.—See Water Works, etc.

Printing (Job) Outfit.—E. P. Lakeman, Haleyville, Ala.—Prices on small job printing outfit.

Pumping (Duplex) System.—City Comsn., E. P. Owen, Jr., Secy., Jacksonville, Fla.—Bids until June 1 to furnish automatically controlled duplex pumping machinery for Orange and Ocean Sts. sewers and Fairfield sewer well; each unit for Orange and Ocean Sts. equipment to have capacity of 400 g. p. m. against total lead of 25 ft. including friction lead; capacity for Fairfield plant 600 g. p. m., against lead of 25 ft. including friction lead; information on application to City Engr., Main and Orange Sts.

Pumps.—Robert W. Hunt Co., 175 W. Jackson Blvd., Chicago, Ill.—Pumps for 200 ton daily capacity salt mine.

Radio Instruments, etc.—G. S. Rowe, Mgr., Mobile Radio Co., 763 Palmetto St., Mobile, Ala.—Informations and prices from manufacturers of radio and electrical instruments and appliances.

Radio Equipment.—S. Louis Bode, Secy., Bode-Schneider & Co., 912 Twiggs St., Tampa, Fla.—Radio supplies and equipment.

Road Construction.—Sumter County, Permanent Road Comsn., Sumter, S. C.—Bids until May 31 to grade, construct drainage structures, and hard surface pavement on following roads:

3.64 mi. Statesburg road, Federal Aid Project No. 163.

1.74 mi. Camden road, Sec. A.

4.50 mi. Pinewood Road.

4.77 mi. Camden road, Sec. B; grade only; 39,000 cu. yds.; plans, etc., from Lee, Pennell & Murray, Engrs., Sumter; plans, etc., for F. A. Project No. 163, from State Highway Dept., Columbia, S. C.

Road Construction.—Jefferson County, Bd. of Revenue, Birmingham, Ala.—Bids until June 9 to grade and surface Docena-Mulga cut-off road; 7000 cu. yds. grading; 1800 cu. yds. chert or clnders surfacing; plans, etc., from C. J. Rogers, County Highway Engr.

Road Construction.—Russells County Comms., Court, Paul Tremmler, County Judge, Ballinger, Tex.—Bids until May 26 to construct 9.8 mi. gravel surfaced road on Ballinger Ave. (State Highway No. 30); also 3 blocks 6-in. concrete pavement in Winters,

Tex.; plans, etc., from U. Stephens, County Engr., and State Highway Dept., Austin, Tex.

Road Construction.—North Carolina State Highway Comsn., Raleigh, N. C.—Bids until June 28 on following projects:

No. 167—Northampton County, 20.8 mi. soil road between Boone's Mill and Hertford County line; Route No. 48.

No. 145—Hertford County, 12.6 mi. soil road between Winton and Northampton County line; Route No. 48.

No. 200—Carteret County, 14.2 mi. hard surface road between Moorehead City and Craven County line; Route No. 101.

No. 386—Robeson County, 12.2 mi. hard surface road from Maxton to Pembroke; Route No. 20.

No. 473—Vance County, 9.8 mi. hard surface road from Henderson to Warren County line; Route No. 50.

No. 402—Chatham County, 6.7 mi. soil road between Siler City and Randolph County line.

No. 463—Person County, 11.8 mi. hard surface road between Roxboro and Durham County line; Route No. 13.

No. 420—Franklin County, 1.6 mi. hard surface on route 58, E. & W. of Louisville; Route No. 56.

No. 419—Franklin County, 13.8 mi. soil road between Louisburg and Nash County line; Route No. 56.

No. 665—Richmond County, 6.6 mi. hard surface road between Rockingham and Hamlet; Route No. 20.

No. 711—Ashe County, 6.5 mi. road between Jefferson and Wilkes County line; Route No. 68.

No. 713—3 mi. hard surface road east of Jefferson; Route No. 68.

No. 800—Avery County, 6.7 mi. hard surface road between Mitchell County line and end Project No. 100-B; Route No. 60.

No. 814—Burke County, 8.1 mi. soil road between Morganton and Caldwell County line; Route No. 18.

No. 821—Cleveland County, 1.5 mi. hard surface road between Kings Mountain and Gaston County line; Route No. 20.

Road Construction.—Neeshoba County, Chancery Clk., Philadelphia, Miss.—Bids until June 6 to grade 18 mi. Neshoba County township 12, range 18 east; \$15,000 available; plans, etc. on file, or from J. M. Clay, Stallio, Miss.

Road Construction.—Louisiana Highway Comsn., Maison Blanche Annex, New Orleans, La.—Bids until May 26 to surface following highways: Bossier City—Ninock, 6.9 mi.; Forks to Curtis; Bossier City—Minden, 6.32 mi.; Forks to Red Chute; 10,000 yds. gravel; plans, etc., from J. M. Fourmy, State Highway Engr. (Lately noted bids until Apr. 24.)

Road Construction.—State Highway Dept., Nashville, Tenn.—Bids until June 9 to construct 6.61 mi. Federal Aid Highway No. 49 in Cannon Co., from Woodbury to Rutherford County line; grade and construct drainage structures; D. Q. McComb, Ch. Engr., Nashville.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids until May 26 to construct 11.26 mi. State road from Ironton to Potosi; grade and construct drainage structures; Iron County, Federal Aid Project No. 107, Section A; H. D. Griffith, Div. Engr., De Soto, Mo.

Road Construction.—Carter County, Blue Spring Road Comms., Elizabethton, Tenn.—Bids until June 15 to grade, drain and macadamize 7 mi. road; C. P. Toneray, County Engr.

Road Construction.—Noxubee County Comms., Dist. No. 1, Macon, Miss.—Bids opened May 20 to gravel surface Macon and Memphis roads, and Brookville and Bigbee Valley Road.

Road Construction.—Adams County, Board of Supvrs., F. V. Elsele, Clk., Natchez, Miss.—Bids until June 5 to construct 9½ mi. gravel highway between Washington and Leesdale; plans, etc., on file.

Road Construction.—East Baton Rouge Parish Police Jury, Baton Rouge, La.—Bids opened May 22 to surface with sand clay gravel 12.6 mi. roads in Road Dist. No. 2, Series J, 3rd Ward: Meekin, Dyer, Scotland and Baker, Box Factory, Dixie and Thielman; 10,000 cu. yds. gravel; F. A. Woods, Secy.; L. Q. Huey, Engr. in charge.

Road Construction.—Escambia County Comms., L. S. Gilmore, Pensacola, Fla.—Bids until May 30 for following projects:

4—Sta. 883 plus 86.4 to Sta. 776 plus 90; 2 mi. Pensacola-Nunez Ferry road; 21,327 sq. yds. reinforced cement concrete or plain cement concrete paving or plain cement concrete base, with 21,327 lin. ft. plain concrete curbing, integral; 17,762 sq. yds. vitrified brick surface with cement grout filler, or bituminous concrete surface or Kentucky rock asphalt surface.

5—Sta. 2046 plus 75, to Sta. 2253 plus 95; 4 mi. Pensacola-Flomaton road; 42,240 sq. yds. reinforced cement concrete or plain cement concrete paving or plain cement concrete base, with 42,240 lin. ft. plain concrete curbing, integral; 38,893 sq. yds. vitrified brick surface with cement grout filler, or bituminous concrete surface, or Kentucky rock asphalt surface.

6—Sta. 1318 plus 80.6, to Sta. 1352 plus 30.6; 445 mi. Pensacola-Flomaton road, at Pine Barren Hill, 27 mi. from Pensacola; 6398 sq. yds. reinforced cement concrete or plain cement concrete paving; plans, etc., from Jas. Macgibbon, Clk.

Road Construction.—State Road Comsn., Charleston, W. Va.—Bids until June 6 on following projects:

3038—Fayette County, 5.3 mi. Ansted to Falls District line.

1128—Kanawha County, .5 mi. Elk River road.

3050—Logan County, 7.5 mi. Clothier-Blair road.

3063—Wyoming County, 4.8 mi. Mullens-Elmore road; pave 1000 ft. with brick, balance with concrete on concrete base, with bituminous concrete, Warrenite or rock asphalt surface as alternates.

3110—Mingo County, 12 mi. Mary Taylor—Island Creek road; gravel surface.

55—Tyler County, 1.2 mi. Middlebourne-Salem road; bituminous macadam surface.

3069—Roane County, 2 mi. Spencer-Roady road, grading and drainage structures, and .5 mi. concrete paving.

3074—Jackson County, 5 mi. Cottageville-Ripley road.

3075—Jackson County, 5 mi. Ripley-Kenna road.

3089—Hancock County, 1 mi. Weirton-New Cumberland road.

3114—Brooke County, 1 mi. East Steubenville towards Hollidays Cove; pave with concrete.

3115—Ritchie County, 2 mi. Cairo—Shields road; concrete.

3117—Wetzel County, 3.5 mi. Hundred-Littleton road, bituminous macadam on Telford base.

3141—Marshall County, 3 mi. Waynesburg pike; concrete.

3019—Preston County, 10 mi. Kingwood-Terra Alta road; bituminous macadam.

3024—Upshur County, 2 mi. Buckhannon-Weston road; concrete.

3025—Taylor County, 3 mi. Grafton-Clarksburg road; concrete.

3022—Lewis County, 5 mi. Weston—Jane Lew road; concrete.

3110—Braxton County, 6 mi. Sutton-Gasaway road.

3020—Doddridge County, 3 mi. Harrison County line—West; concrete.

3123—Harrison County, 2 mi. Salem-Bristol road; concrete.

115—Berkeley County, 4.9 mi. Winchester Pike; bituminous concrete, Warrenite or rock asphalt.

3034—Jefferson County, 1.9 mi. Harpers Ferry-Boliver road; concrete.

3029—Tucker County, 6 mi. Elkins-Parsons road.

3105 and 3-3.7 Pendleton County, Franklin-Petersburg road, gravel; 1 mi. gravel surface.

3011—Hampshire County, 3 mi. Mechanicsburg Gap-Romney road; gravel surface.

34 and 60—Monroe County, 4.3 mi. clean and cold surface application.

48 and 2006—Fayette County, 14.1 mi. clean and cold surface application.

1 and 2003—Greenbrier County, 7.9 mi. clean and cold surface application.

2039, 2040, 2042, 2043 and 2044—Mercer County, 2.1 mi. clean and cold surface application.

72—Hampshire County, 3.3 mi. clean and cold surface application.

62—Hardy County, 7.5 mi. clean and cold surface application.

64—Jefferson County, 2 mi. clean and cold surface application.

67—Berkeley County, 2 mi. clean and cold surface application.

1131—Berkeley County, 1 mi. clean and cold surface application.

2003—Mineral County, 2 mi. clean and cold surface application; grade and construct drainage structures; plans, etc. on file and from Div. Engrs.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids opened May 24 to construct 1.219 mi. State road from Monticello eastward and westward; grade and construct drainage structures; Lewis County, State Aid Project No. 20,163; M. J. Hanick, Div. Engr., Howe Bldg., Macon, Mo.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids in June to hard surface Williamsburg-Calwood Highway; Callaway County; W. P. Divers, County Highway Engr.

Road Construction.—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md.—Bids until May 31 to construct following:

Queen Annes County, 2.11 mi. State Highway from end Cont. Q-18 at Carville to intersection with present State road ¼ mi. north Centerville; Cont. Q-23.

Caroline County, 1.5 mi. State Highway from end Cont. CO-26 at Ridgely toward Baltimore corner; Cont. CO-31.

Dorchester County, 1.75 mi. State Highway from East New Market to Secretary; Cont. D-27; all concrete.

Baltimore City, 1.87 mi. State Highway along Falls Road between Maryland Ave. and 36th St.; Cont. BC-38; sheet asphalt.

Sewer Construction.—City of Chickasha, Okla., O. Coffman, Mayor.—Bids until May 25 to construct lateral sewer in Dist. No. 32; plans, etc. on file at office of J. R. Wellborn, City Clk.

Sewers and Water Pipe.—Washington Suburban Sanitary Comsn., Evans Bldg., New York Ave.—Bids until June 7 for furnishing and laying the following: 15-S 20,500 ft. of 6 to 15-in. sewers, 16-S 26,500 ft. of 6 to 15-in. sewers, 28-W 42,000 ft. of 6 to 12-in. water pipe, 30-W laying 10,800 ft. of 12 to 20-in. water pipe; plans from Robt. B. Morse, Ch. Engr. of Dist. Hyattsville, Md.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids opened May 25 to construct 3.829 mi. State road from New London south westward; grade and construct drainage structures; gravel and water bound macadam surfacing; 16-ft. wide; Ralls County, State Aid Project No. 20,168; M. J. Hanick, Div. Engr., Howe Bldg., Macon, Mo.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids opened May 23 to construct 2.009 mi. State road from Kirksville eastward and westward; grade and construct drainage structures; Adair County, State Aid Project No. 20,161; M. J. Hanick, Div. Engr., Howe Bldg., Macon, Mo.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids opened May 18 to construct 5.57 mi. State road from Booneville eastward; grade and construct drainage structures; pave with broken stone base course with bituminous macadam surface courses, or sledge stone base course with waterbound macadam intermediate course and inverted penetration bituminous surface, 16-ft. wide; Cooper County, Federal Aid Project No. 24; S. M. Rudder Div. Engr., Ilgenfritz Bldg., Sedalia, Mo.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids opened May 22 to construct 3.864 mi. State road from St. Louis to Springfield; grade and construct drainage structures; Webster County, State Aid Project No. 20,166; H. P. Moberly, Div. Engr., Woodruff Bldg., Springfield, Mo.

Road Equipment.—Hillsborough County Comms., C. T. Friend, Chrmn., Tampa, Fla.—Bids opened May 26 for one or more 300 and 500 gal. asphalt heating tanks; 3 and 10-ton gas driven road rollers.

School Furniture.—A. B. Rhett, Supt., Charleston, S. C.—Bids until June 1 on school furniture.

Rock Crusher.—See Paving Equipment.

Rollers.—V. W. Helm, Secy., Temple Terraces, Inc., 801 Citrus Bldg., Tampa, Fla.—Bids on second hand road rollers, 10 ton, 3 wheel type.

Sewer Construction.—City of Lexington, N. C., J. A. Leonard, Mayor.—Bids until June 6 to construct 12 mi. of 8 to 18-in. sewer laterals and outfalls; specifications on file at office of Gilbert C. White Co., Durham, N. C., Engr. and office of Paul R. Raper, Clk., Lexington.

Sewer Construction.—City of Maplewood, Mo., John D. Schuster, Mayor, Geo. D. Komar, City Clerk.—Bids until May 31 to sewers in Maplewood Joint Sewer Dist. N. 1; maps, specifications on file at office of City Clerk or City Engr.

Sewer Construction Materials.—Wm. F. Broening, Pres., Board of Awards, Dept. of Public Improvements, Baltimore, Md.—Bids until May 31 for construction of sewers and house connections in following districts: Dist. 49-C and G-2-1, Contract No. 191, 15,865 lin. ft. of 12-8-in. vitrified sewer pipe, 3657 lin. ft. of 5-6-in. vitrified pipe house connections, 74 manholes; Dist. 38-A, Contract 127, 17,339 lin. ft. of 8-10-12 vitrified pipe sewers, 13,960 lin. ft. of 5-6 vitrified pipe house connections, 153 manholes; Dist. H-2-1, Contract No. 290, 44,724 lin. ft. 8 to 24-in. vitrified pipe sewer, 16,362 lin. ft. of 5-6 vitrified pipe house connections, 181 manholes; Richard Gwinn, Reg. City Hall; plans obtainable at office of A. E. Christhill, Highways Engr., City Hall.

Sewer Construction.—City of Jacksonville, Fla., E. P. Owens, Jr.—Bids until June 1 to furnish certain materials and construct storm water and sanitary sewers as follows: 23rd St. from Talleyrand Ave. to St. Johns River, about 1650 ft. of 24-in. reinforced concrete pipe; 12th St. from D St. to St. Johns River, about 18-ft.x36-ft.72-in. reinforced concrete monolithic storm drain; Copeland St. from Forbes to Oak St., 1000 ft. 8-in. sewer laid on concrete base; Sparring St. from 10th St. to 8th St., 8th St. from Sparring St. to Evergreen Ave., 1107 ft. 8-in. V. C. sewer laid on concrete base; specifications on file at office of City Engr.

Sewer Construction.—City of Huntington, W. Va., Mat Miser, Commr. of Streets and

Sewers.—Bids until May 24 to construct lateral sewer in Three and One Half Alley from Alley East of 31st to 32nd St.; plans etc., on file at office of A. B. Maupin, City Engr.

Sewer Construction.—S. H. Monger, Recorder, Lenoir City, Tenn.—Bids until May 23 to construct 13 catch basins, 20 lin. ft. of 18 in. pipe, 42 cu. yds. of concrete and necessary trenching in connection with street paving; bids on concrete base with concrete top, on either base of crushed rock (limestone or river run rock; plans and specifications at City Hall.

Sewer Construction.—District Comms., Cuno H. Rudolph, Chas. Keller, Washington, D. C.—Bids until May 26 to construct 2700 ft. of sewer and about 900 ft. of new invert; detailed information on application to Room 427, District Bldg.

Sewer Construction.—City of Van Alstyne, Tex., O. B. Cotton, City Secy.—Bids opened May 24 to construct and furnish material for sanitary sewer system and disposal plant; approx. 27,600 ft. 6-in. vitrified sewer pipe; 270 6x4 Y's, 7500 ft. 75 8x4 Y's, 42 manholes, 350 cu. yds. rock excavation, 100 cu. yds. earth excavation, one automatic flush tank, disposal plant complete; plans and specifications from Elrod Engrg. Co., 3206 Elm St., Dallas, Tex., Gen. and Consult. Engrs.

Sheet Metal, etc.—J. C. Reynolds, 519 Center St., Owensboro, Ky.—To purchase sheet metal for drums, also material for constructing truck for tanks; for tobacco curing plant.

Shovel (Steam).—Box 1202, Jacksonville, Fla.—To rent with option of purchase, $\frac{3}{4}$ yd. caterpillar steam shovel; any standard make.

Signs (street).—J. N. Landers, Purchasing Agt., Atlanta, Ga.—Bids until May 22 to furnish approx. 475 street signs; further information on application.

Skidders.—R. A. Kunnes, Thomson, Ga.—To purchase skidders, for pulling logs out of swamps.

Soap Making.—S. Louis Bode, Secy., Bode-Schneider & Co., 912 Twigg St., Tampa, Fla.—Prices and data on soap making.

Sprinkler System.—Ivey Mfg. Co., Hickory, N. C.—Second-hand sprinkler equipment.

Straight Edge.—Chas. T. Lehman, Machinery Co., 2300 Ave. A, Birmingham, Ala.—Straight edge standard size.

Street Paving Materials.—City, T. N. Canada, Pur. Agt., Lynchburg, Va.—Street paving materials, including brick, concrete and bituminous macadam.

Stoves (Electric, Cooking).—H. Shain, Jacob Bldg., Fairmont, W. Va.—Data and prices on electric cooking stoves, using current from 300 to 400 K. W.

Tank and Tower.—Ivey Mfg. Co., Hickory, N. C.—50,000 gal. capacity steel tank and steel tower, second-hand.

Structural Steel.—J. C. Wev, Bernice, La.—Structural steel. See Building Material.

Supplies.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids until May 29 to furnish: Blanco; fire extinguisher fluid; candles; neatsfoot oil; metal and stove polish; scouring soap; delivery Depot Quartermaster, U. S. M. C., Philadelphia, Pa.; Sch. 363; information on file or at 1100 S. Broad St., Philadelphia.

Tanks.—J. C. Reynolds, 519 Center St., Owensboro, Ky.—To purchase 25 gal. tanks for tobacco curing plant.

Test Well.—R. N. Beatty, City Clk., Cape Charles, Va.—8-in. test well driven 150 to 250 ft. with prospects of two or more additional wells; specification on application.

Tower, Tank and Pump.—V. W. Helm, Secy., Temple Terraces, Inc., 801 Citrus Exchange Bldg., Tampa, Fla.—Proposals from mfrs. and dealers on new tower, tank and pump.

Turbine, etc.—Sewerage and Water Board, A. J. Moffat, Secy., New Orleans, La.—Bids until July 19 to furnish one 6000 K. W. turbine and accessories; information obtainable at Room 303, 526 Carondelet St.

Umbrella Materials.—C. W. Mayberry, Taylorsville, N. C.—To correspond with mfrs. of umbrella ribs, rods and all material necessary in mfrs. of umbrellas.

Veneer Machinery.—Lingo Metal Works, Wilmington, N. C.—Second-hand veneer machinery to make crates and berry baskets.

Water Pipe.—V. W. Helm, Secy., Temple Terraces, Inc., 801 Citrus Exchange Bldg., Tampa, Fla.—Prices on second hand galvanized iron water pipe in sizes from $\frac{3}{4}$ -in. to 4-in. inclusive, and second hand cast iron water pipe in 4-in. and 6-in. sizes.

Woodworking Equipment.—Chas. T. Lehman Machinery Co., 2300 Ave. A, Birmingham, Ala.—Automatic gang saw sharpener; automatic circle rip saw sharpener; moveable roll stretcher; pony gang filing clamps; hand circle saw set and Pribnow swage sharpener.

Water and Sewer Construction.—City of Center, Texas, J. W. Shotwell, Mgr.—Bids until May 23 to construct water and sewer system; including 3 mi. cast iron mains, 2 mi sewer pipe, etc.; specifications on file at office of Mgr. or office of E. E. Sands, 421 Mason Bldg., Houston, Consult. Engr.

Water Works.—City of Nashville, Tenn., Felix Z. Wilson, Mayor.—Bids opened May 16 to construct 6-in. water main in 16th Ave.; specifications on file at office of Supt. of Water Works.

Water Works.—City of Greensboro, N. C., P. C. Painter, Mgr.—Bids until June 6 for building dam across Reedy Fork Creek to develop impounding reservoir, and for furnishing and installing auxiliary power plant; approx. 4700 cu. yds. of concrete foundations, abutments and spillway, equipped with flood gates, and 30,000 cu. yds. of earth embankment; 12 8x6 ft. gates and 5 6x6 ft. gates, pumping unit consisting of centrifugal pump with capacity of 3500 G. P. M., against 150 ft. head connected through gears to twin horizontal turbines operating under 12 to 14 ft. head; plans on file at office of City Mgr., and Ludlow Engrs., Winston-Salem, N. C., after May 25.

Windows.—E. Homer Tiley, Chrmn., Bldg. Comm., First Baptist Church, Box 915, Teague, Tex. Opalescent windows.

Woodworking Machinery.—J. L. & C. Wilkinson Mfg. Co., Milligan, Fla.—To correspond with mfrs. of machinery for making strawberry crates, also for furniture and novelty shops.

Financial News

New Financial Corporations.

Ala., Birmingham—Mercantile Finance Corp., capital \$255,000, incept. with E. B. Irwin, Pres.; Hugh A. Locke, V.-P. (Late-ly noted.)

Ala., Florence—Alabama Mutual Loan Assn., inceptd. with \$100,000 capital.

Fla., Fort Lauderdale—Broward Building

& Loan Assn., capital \$50,000, inceptd. with B. E. Dye, Prest.; C. P. Wielding, V.-P.

Ala., Gadsden—Gadsden Loan & Savings Bank, capital \$50,000, organized by Dr. J. W. Morgan and G. B. Hale, both Chattanooga, Tenn.

La., New Orleans—First Joint Stock Land Bank, capital \$250,000, inceptd. with Sidney Souers, Prest.; J. L. Hiers, V.-P. and J. P. Ohlsen, Treas. (Lately noted.)

Md., Baltimore—Oakfield Realty Co., 616 S. Charles St., capital \$50,000, inceptd. by Julius Cohen, Abraham Wise and A. Herman Siskind.

Md., Baltimore—Peyton B. Strobel Co., 607 Munsey Bldg., capital \$12,500, inceptd. by Peyton B. Strobel, Robt. H. Wildman and Leslie P. Strobel.

Md., Baltimore—Syndicate Finance Corp., 3 E. Lexington St., capital \$50,000, inceptd. by Thos. A. Haughton, Eugene O'Dunne and Jesse D. Lawrence.

Miss., Jackson—Neville Audit Co., \$10,000 capital, inceptd. by J. H. Neville, J. O. Gray and R. B. Meadows.

Miss., Ripley—Peoples Bank, capital \$15,000, inceptd. by J. F. Guyton, Jr., J. F. Hall and others.

Mo., Kennett—Dunklin County Savings & Loan Assn., \$500,000 capital, inceptd. with R. Ira Jones, Prest.; E. Y. Baldwin, V.-P. (Lately noted.)

Mo., New Bloomfield—New Bloomfield Bank, reorganized with \$30,000 capital.

Mo., St. Louis—St. Louis National Bank, capital \$200,000, successor to Union Station Trust Co.; Thos. N. Karraker, Correspondent.

N. C., Winston-Salem—American Bond and Mortgage Co., capital \$125,000, organized with John F. Smithfield, Prest. and Ernest G. Shore, Treas.

Okl., Bokchito—First Natl. Bank, capital \$25,000, reorganized with W. S. Works, Prest.; L. W. Hughes, Cashr. (Lately noted.)

Okl., Erick—Farmers Natl. Bank of Erick, inceptd. with \$25,000 capital; C. S. Borin, Correspondent.

S. C., Anderson—Anderson Building & Loan Association, organized by W. L. Brissett, E. P. Vandiver, D. S. Vandiver and others.

S. C., Florence—Florence Title Trust & Investment Co., capital \$100,000, organized with M. D. Lucas, Prest.; Geo. A. Fittz, Secy.

Tex., Dallas—Dallas County State Co., capital \$50,000, inceptd. by Chas. L. Sanger, W. M. Holland, A. P. Cunningham and others.

Tex., Dallas—Trinity Bldg. & Loan Assn., \$1,000,000 capital, inceptd. with Charles A. Myers, Prest.; Dan M. Craddock, V.-P. (Lately noted.)

Tex., San Antonio—Security Building & Loan Assn., capital \$5,000,000, inceptd. by R. C. Hill, G. D. Campbell, Albert Steves, Jr., and others.

Tex., Terrell Bldg. & Loan Assn., capital \$300,000, inceptd. with C. J. Newton, Prest.; Lucius, V.-P. (Lately noted.)

Va., Bristol—Bristol Savings & Loan Co., \$50,000 capital, organized with W. H. Gibson, Prest.; Carl H. King, Vice-Prest.

Va., Richmond—American National Bank, organized North side office; \$1,000,000 capital; Oliver J. Sands, Prest.; O. B. Hill, Cashier. (Lately noted.)

New Securities.

Ala., Birmingham—Improvement—City Comsn., receives bids until May 30 for \$88,560 bonds.

Ala., Dothan—Electric Plant—City will issue \$750,000 bonds. Address The Mayor.

Ala., Jasper—Funding—City voted \$50,000 bond issue. Address The Mayor.

Ala., Selma—Paving—City, Wm. B. Hall, Mayor, receives bids until June 1 for \$54,500 6% bonds.

Ala., Sulligent—School—City voted \$10,000 bonds. Address The Mayor.

Ala., Tuscaloosa—Hospital—City Commrs., D. B. Robertson, Prest., receive bids until May 30 for \$50,000 5% bonds.

Ark., Forrest City—Road—St. Francis County Commrs. of Road Dist. No. 2 sold \$225,000 6% bonds to M. W. Elkins & Co., Little Rock at \$3550 premium. (Lately noted.)

Ark., Gurdon—Water and Sewer—City, H. O. Robbs, Secy., sold \$100,000 6% bonds to M. W. Elkins & Co., Little Rock; mature 1 to 20 years.

Fla., Auburndale—Waterworks—Board of Bond Trustees, W. L. Mason, Clk., sold \$30,000 6% serial bonds to W. L. Slayton & Co., Toledo, O., for \$29,000, or 96.66 and accrued interest; \$1000 denomination; dated Apr. 1, 1922; mature 2 annually from 1927 to 1941. (Lately noted.)

Fla., Bradentown—Road and Bridge—Manatee County Commrs., sold \$360,000 bonds for Manatee-Oneco Special Road and Bridge District.

Fla., Clearwater—Water, Sewer, Paving and City Hall—City, J. R. Thomas, Clk., sold \$240,000 bonds to W. L. Slayton & Co., Toledo, O., at \$12,721 premium and accrued interest. (Lately noted.)

Fla., Delray—Road—City votes June 6 on \$70,000 bonds. Address The Mayor.

Fla., Fort Lauderdale—Improvement—City sold \$75,000 bonds to First Natl. Bank at par, accrued interest and \$125 premium. Address The Mayor.

Fla., Green Cove Springs—City sold \$150,000 6% bonds to Atlantic Natl. Bank, Jacksonville, at 100.52. (Lately noted.)

Fla., Quincy—Paving, Sewer, Water and Light—City, J. P. Smith, Clk., voted \$98,000 5% serial bonds; \$500 denomination. (Lately noted.)

Fla., Miami—Road, School, Fairground, etc.—Dade County votes June 20 on \$1,580,000 bonds. Address County Commrs. (Lately noted.)

Fla., Milton—Road and Bridge—Santa Rosa County, Chas. H. Overman, Engr., sold \$35,000 bonds at 95.

Fla., Tavares—Road—Lake County Commissioners, South Lake Road & Bridge District voted \$250,000 bonds.

Fla., Tavares—Road—South Lake County Road and Bridge Dist. voted \$250,000 bonds. Address County Commrs. (Lately noted.)

Fla., Tavares—School—Lak County Board of Public Instruction, W. C. Jones, Chrmn., called election for June 10 on \$16,500 6% bonds; \$500 and \$1000 denomination.

Fla., West Palm Beach—Road and Bridge—Palm Beach County Commrs. receive bids until June 3 at office of Fred E. Feno, Clk., for \$150,000 6% bonds; \$1000 denomination.

Fla., West Palm Beach—Road and Bridge—Palm Beach County will vote June 15 on \$150,000 bonds.

Fla., West Palm Beach—Road—Palm Beach County votes June 6 on \$70,000 bonds. Address County Commrs.

Fla., West Palm Beach—School—City voted \$200,000 bond issue. Address The Mayor.

Fla., West Palm Beach—Road and Bridge—Palm Beach County voted \$250,000 bonds in Stuart-Palm City Dist., and \$80,000 bonds in Jupiter Dist. Address County Commrs.

Fla., Winter Haven—Sewer, Paving, City Hall and Whiteway—Town, M. L. Hinderliter, Clk., receives bids until June 9 for \$275,000 6% bonds; \$1000 denomination; dated May 1, 1922; mature from 1925 to 1952.

Ga., Atlanta—Improvement—Georgia Ry. & Power Co., P. S. Arkwright, Prest., made application to issue \$3,500,000 6% 25-yr. general mortgage gold bonds.

Ga., Forsyth—Street Improvement—City, Jas. A. Tribble, Mayor, voted \$75,000 5% bonds; \$1000 denomination; mature from 10 to 30 years. (Lately noted.)

Ga., West Point—Water Works—City, J. A. Avary, Mayor, votes June 14 on \$25,000 5½% bonds; \$1000 denomination.

Ky., Bowling Green—School—City voted \$100,000 bonds. Address The Mayor.

Ky., Corbin—School—Board of Education, J. L. McNabb, Secy., is receiving bids for \$75,000 5% bonds.

Ky., Harlan—Road—Harland County, J. B. Carter, Atty., receives bids until May 27 for \$350,000 5% 23-year bonds; \$1000 denomination.

Ky., Irvine—Road and Bridge—Estill County, Clarence G. Sproul, Judge, will 20-yr. 5% bonds voted.

La., St. Francisville—Road—West Feliciana Parish, J. R. Matthews, Treas., sold \$230,000 5% 18½-yr. average bonds to M. W. Elkins & Co., Little Rock. (Lately noted.)

La., Benton—School—Bossier Parish School Board, R. V. Kerr, Secy., sold \$150,000 6% bonds to Caldwell & Co., Nashville, Tenn., at par, accrued interest and \$7411.11 premium. (Lately noted.)

La., Covington—Road—St. Tammany Parish Police Jury, J. B. Heuze, Prest., receives bids until June 13 for \$250,000 5% bonds.

La., Donaldsonville—Road and Refunding—Ascension Parish Police Jury, W. B. Stuart, Prest., receives bids until June 14 for \$85,000 road and \$57,000 refunding bonds; 6%.

La., Jonesville—School—Catahoula Parish School Dist. No. 5, vote July 6 on \$75,000 6% bonds; \$1000 denomination; mature serially from 1 to 20 years; H. W. Wright, Secy., School Board.

La., New Roads—Improvement—City, Jos. Lejeune, Mayor, receives bids until May 22 for \$25,000 bonds.

La., Opelousas—Road—St. Landry Parish Police Jury, F. Octave Pavy, Prest., receives bids until June 5 for \$75,000 5% bonds.

La., Point a la Hache—Road—Plaquemines Parish Police Jury, B. A. Favret, Prest., receives bids until May 30 for \$133,500 6% bonds; \$500 denomination.

Ma., Cambridge—Dorchester County Commrs., John A. Baker, Prest., receives bids until June 20 for \$200,000 4½% bonds; \$1000 denomination.

Md., Cumberland—Water—City sold \$250,000 4¼% bonds to syndicate composed of Equitable Trust Co., J. S. Wilson, Jr., & Co. and Union Trust Co., Baltimore, at 103.85.

Md., Elkton—Road—Cecil County Commrs. will sell \$50,000 bonds.

Miss., Crowder—School—City, S. Edward Lester, Clk., H. A. Anold, Mayor, receives bids until June 5 for bonds.

Miss., Jackson—State Bond Improvement Comsn., sold \$1,000,000 4¾% short term notes to Bank of Commerce & Trust Co., Memphis, at par, accrued interest and \$3520 premium.

Miss., Jackson—Water Works—City votes June 3 on \$10,000 bonds. Address The Mayor.

Mo., Boonville—Road—City sold \$50,000 bonds to W. R. Compton Bond Co., St. Louis, at \$1378 premium. Address The Mayor.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Mo., California—Water, Fire Equipment, Pump House, Etc.—City votes June 6 on \$60,000 bonds. Address The Mayor.

Mo., Columbia—Dormitory—Bd. of Regents of Stephens College, sold \$100,000 7½% bonds to Boone County Trust Co., at 97; \$1000 denomination. (Lately noted.)

Miss., Durant—Water, Sewer and School—City, D. V. Pound, Mayor, receives bids until June 1 for \$80,000 6% 25-year bonds. (Lately noted.)

Miss., Fayette—Road—Jefferson County, O. S. Gillis, Clk., receives bids until June 5 for \$50,000 bonds. (Lately noted.)

Mo., Fayette—Bridge—City votes May 26 on \$105,000 bonds. Address The Mayor.

Mo., Jefferson City—Improvement—Union Electric Light & Power Co., will issue \$600,000 5% bonds.

Mo., Jefferson City—Improvement—City sold \$84,500 5% bonds to First Natl. Bank for \$100,125. Address The Mayor.

Mo., Kansas City—School—City receives bids until May 23 for \$1,000,000 5% bonds. Address The Mayor.

Mo., Marshall—School—City voted \$190,000 bonds. Address The Mayor.

Mo., Poplar Bluff—Road—Butler County, W. M. Henson, Clk., will sell \$300,000 bonds; \$1000 denomination.

Mo., Troy—Road—Lincoln County Comms. sold \$100,000 5% bonds to Theis & Diestelkamp Investment Co., St. Louis, at 104.21.

Mo., Versailles—Waterworks—Board of Aldermen sold \$81,000 5% bonds to G. H. Walker & Co., St. Louis, at \$826 premium.

Miss., Biloxi—School—City will issue \$15,000 bonds for Harrison-Jackson Consolidated School. Address The Mayor.

Miss., Natchez—Adams County Board of Supprs., Frank V. Elsele, Clk., receive bids until June 6 for \$40,000 5% serial coupon bonds; \$500 denomination.

N. C., Bailey—School—Bailey School Dist., A. B. Farmer, Chrmn., receives bids until May 22 for \$8800 6% bonds; \$1000 denomination.

N. C., Bailey—School—City votes May 31 on \$10,000 bonds. Address The Mayor.

N. C., Black Creek—Electric—Town, G. G. Smith, Clk., opens bids May 24 for \$10,000 6% bonds; \$1000 denomination.

N. C., Charlotte—Road—Mecklenburg County Comms., R. E. Young, Clk., sold \$1,400,000 bonds to Chase Securities Corp., Redmond & Co., Van Ingen & Co., and Paine, Webber & Co., at 102.329. (Lately noted.)

N. C., Edenton—Electric—Town, R. E. Leary, Clk., sold \$30,000 6% bonds to Spitzer, Rorick & Co., Toledo. (Lately noted.)

N. C., Highland—Street—Town, A. T. Fox, Clk., receives bids until June 5 for \$25,000 6% bonds; \$1000 denomination.

N. C., Jefferson—Road—Ashe County Comms. sold \$135,000 6% to Provident Savings Bank & Trust Co., Cincinnati, at \$10,937 premium. (Lately noted.)

N. C., Lenoir—County Home—Caldwell County Comms., John M. Crisp, Clk., sold \$51,000 5½% bonds to Hanchett Bond Co., Chicago, Ill., at \$1611 premium. (Lately noted.)

N. C., Mebane—School—City voted \$75,000 bonds. Address The Mayor.

N. C., Mount Airy—Sewer and Funding—Town Comms., F. M. Moore, Clk., receives bids until June 15 for \$60,000 sewer and \$40,000 funding bonds; 5½%; \$1000 denomination.

N. C., Mount Airy—Funding—Town, F. M. Moore, Clk., will issue \$40,000 bonds.

N. C., Raeford—School—Trustees of Milledousan Graded and High School Dist., G. W. Maxwell, Secy., receives bids at courthouse until May 24 for \$15,000 6% bonds; \$500 denomination. (Lately noted.)

N. C., Sanford—Street—Town, C. L. Gunter, Clk., sold \$250,000 5½% bonds to Claiborne Royall Co., Goldsboro, and Ryan Bowerman Co., Toledo, O., at \$2781 premium. (Lately noted.)

N. C., Taylorsville—School—School District Trustees, Chas. E. Echerd, Secy., sold \$50,000 6% bonds to Prudden & Co., Toledo, O., at \$2155 premium. (Lately noted.)

N. C., Winston-Salem—Improvement—City, W. H. Holcombe, Secy., receives bids until May 25 for \$445,000 5% street, \$335,000 4¼% water, \$250,000 4¼% sewer, \$200,000 4¼% improvement, \$100,000 4¼% street, \$50,000 4¼% hospital, \$1,000,000 4¼% playground, \$300,000 4¼% school, \$40,000 5% fire and \$231,000 5% street bonds.

Okl., Cushing—School—School Board will call election on \$65,000 bond issue.

Okl., *Kingfisher—School—City voted \$80,000 bonds. Address The Mayor.

Okl., Madill—Road—Marshall County, Earl E. Ayres, Clk., votes June 12 on \$350,000 5% 25-yr. bonds; sold subject to election returns, to R. J. Edwards, Oklahoma City, at par, accrued interest and \$1250 premium.

Okl., Oilton—School—Attorney General, Austin, approved \$44,000 bond issue. Address The Mayor.

Okl., Purcell—School—Board of Education sold \$75,000 5% 25-year bonds to Taylor-White Co., Oklahoma City; \$1000 denomination. (Lately noted.)

Okl., Sulphur—Road—Murray County Comms. sold \$55,000 bonds to Walker Taylor, Oklahoma City, at accrued interest and \$250 premium.

Okl., Wilburton—Road—Lattimer County voted \$250,000 bonds. Address County Commissioners.

S. C., Bamberg—School—City considers calling election on \$35,000 bonds. Address The Mayor.

S. C., Charleston—School—Board of Public School Comms., Geo. H. Moffett, Chrmn., A. B. Rhett, Clk., receives bids until May 27 for \$200,000 5% bonds; \$1000 denomination dated July 15, 1922; mature July 15, 1947.

S. C., Columbia—School—City will vote on \$75,000 bond issue; C. S. Monteith, interested.

S. C., Rock Hill—School—City voted \$150,000 bonds issue. Address The Mayor.

S. C., Union—Street—Street Comsn. receives bids until June 6 at office of Emslie Nicholson, Chrmn., for \$150,000 5% bonds. (Lately noted.)

S. C., Wellford—School—School Dist. voted \$15,000 bond issue. Address School Board.

Tenn., Lawrenceburg—Road—Lawrence County Comms. sold \$60,000 6% bonds to Caldwell & Co., Nashville, at par and \$400 premium.

Tenn., Nashville—Viaduct—City votes June 22 on \$375,000 bonds. Address The Mayor.

Tenn., Richard City—School—City voted bond issue. Address The Mayor.

Tex., Angleton—Brazoria County Comms. sold \$30,000 6% warrants to Sidlo, Simons & Co., Denver.

Tex., Bay City—Road and Bridge—Matagorda County Comms. sold \$30,000 6% bonds to Detroit Trust Co., Detroit at par and \$1705 premium.

Tex., Beaumont—Drainage—Jefferson County Comms. sold \$625,000 bond issue to J. E. Broussard and the Howard Kenyon Dredging Co., at par and accrued interest.

Tex., Bertram—School—City will vote June 3 on \$15,000 bond issue. Address The Mayor.

Tex., Bellevue—School—Bellevue Independent School Dist. Trustees sold \$45,000 5½% bonds to Guaranty Trust Co., Kansas City, Mo., at 102. (Lately noted.)

Tex., Cleburne—Road—Johnson County, J. B. Haynes, County Judge, vote June 24 on \$225,000 bonds.

Tex., Franklin—Road—Robertson County, Joe Reid, Judge, receives bids until May 27 for \$140,000 5% 40-yr. bonds.

Tex., Galveston—School—City plans to vote in July on \$1,000,000 bond issue. Address The Mayor.

Tex., Gonzales—School—Independent School Dist. Trustees, sold \$29,250 bond issue.

Tex., Houston—Improvements—City, Oscar F. Holcombe, Mayor, J. C. McVea, Engr., votes June 12 on \$500,000 paving, \$250,000 drainage, \$250,000 sewer, \$250,000 bridge, \$200,000 library and \$100,000 hospital bonds.

Tex., Jasper—Road—Jasper County Road Dist. No. 2, C. B. Neel, Judge, receives bids until May 22 for \$250,000 bond issue.

Tex., Johnson City—Road—Boanco County Comms. Court, Wm. Martiny, County Judge, votes June 17 on \$40,000 Road Dist. No. 2 bonds.

Tex., Kaufman—School—City, R. J. Rowe, Mayor, opens bids May 22 for \$100,000 5½% bonds.

Tex., Kaufman—School—Attorney General, Austin, approved \$100,000 Kaufman County bond issue. Address County Comms.

Tex., Marlin—Road—Falls County, E. M. Dodson, Judge, votes May 20 on \$30,000 bonds.

Tex., Mexia—School—Attorney General, Austin, approved \$130,000 6% serial bonds. Address The Mayor.

Tex., Nacogdoches—School—City voted \$50,000 bonds. Address The Mayor. (Lately noted.)

Tex., Orange—School—City voted \$175,000 bonds. Address The Mayor.

Tex., Orange—School—School Board, E. B. Stover, Supt., opens bids May 20 for \$175,000 6% bonds.

Tex., Port Arthur—School—City plans to issue \$675,000 bonds. Address The Mayor.

Tex., Richmond—Road—Fort Bend County, C. D. Meyers, Judge, votes May 24 on \$125,000 bonds for road Dist. No. 4.

Tex., San Antonio—School—City considers voting \$2,000,000 bond issue. Address The Mayor.

Tex., San Benito—Water, Light & Power Plant—City, J. Scott Brown, Mayor, votes May 23 on \$75,000 bond issue.

Tex., Texline—Water—City sold \$45,000 water and \$15,000 other 6% bonds to Southwestern Securities Co., Amarillo, at 96.50; \$1000 denomination.

Tex., Tyler—Road Smith County, D. R. Pendleton, Judge, receives bids until June 26 for \$360,000 5½% 1-30-yr. serial bonds.

Tex., Wichita Falls—School—Wichita Falls Independent School Dist. voted \$850,000 bonds. Address School Board.

Va., Ashland—Water and Sewer—City considers issuing \$70,000 bonds. Address The Mayor.

Va., Franklin—Improvement—City sold \$50,000 6% bonds to L. R. Ballinger Co., Cincinnati, O., at par and \$2756.51 premium. Address The Mayor.

Va., King George—Counthouse—King George County voted bonds issue. Address County Comms.

Va., Portsmouth—Sewer and Street—City, L. E. Brinson, Clk., receives bids until May 22 for \$600,000 4¼% 30-year bonds.

Va., Richmond—A New York syndicate headed by Blair & Co. and Hallgarten & Co. will offer for sale \$22,500,000 7½% 25-year Virginia-Carolina Chemical Co. bonds at 98¾, yielding 7.12.

Financial Notes.

Bluefield Trust Co., Bluefield, W. Va., J. R. Laird, Pres.; F. R. Christie, V.-P., increased capital from \$100,000 to \$200,000. (Lately noted.)

Central Loan and Bldg. Assn., California, Mo., plans to increase capital.

Charleston Savings Institution, Charleston, S. C., merged with Exchange Bank & Trust Co.; increased capital from \$100,000 to \$150,000; W. King McDowell, Pres.

Farmers & Merchants Bank, King, N. C., F. E. Shore, Pres., increased capital from \$10,000 to \$15,000.

First Polish—American Building Assn., 1706 Eastern Ave., Baltimore, Md., increased capital from \$400,000 to \$3,000,000.

Lubbock Building & Loan Assn., Lubbock, Tex., increased capital from \$200,000 to \$1,000,000.

Park City Finance Corp., Bowling Green, Ky., increased capital from \$100,000 to \$150,000.

Trade Literature.

Wood Pipe to Resist Acid.

A booklet issued by the American Wood Pipe Co., Tacoma, Wash., with eastern office at 30 Church St., New York City, bears the title "Mine Pipe," as it relates especially to an acid proof wood pipe manufactured especially for the use of mine operators handling large amounts of water highly charged with metal destroying acids. It is particularly noted that sulphuric acid and ferric sulphate in combination have destroyed steel pipe in two days but they have no effect on this pipe, which is made by banding fir staves with an insulated steel wire. Other wood pipe made for irrigation and other purposes is creosoted, if desired, to keep the wood from rotting.

Jacks of Superior Power.

The latest bulletin of Templeton, Kenly & Co., Ltd., 1020 South Central Ave., Chicago, Ill., illustrates and describes Simplex jacks for all lifting purposes. The firm point out some of the fallacies heretofore existing in specifications for jacks and give definite information from an engineering standpoint as to the superior man power of these particular jacks and the reasons therefor. Besides, this bulletin (No. 122), will otherwise be of interest to all users of jacks.

Economy in Road Construction.

A foldc. issued by the Koehring Company, Milwaukee, Wis., bearing the title "One Hour and Fifty-Seven Minutes" contains a very strong testimonial letter from an operator and mechanic on highway contractors' equipment concerning the remarkable efficiency of an 8-E Koehring paver, which he says, "is designed and built in all its parts for durability and maximum efficiency." This operator, John L. Baird, of Canonsburg, Pa., then narrates the story of a job of road construction done with this machine in 1 hour, 57 minutes, and giving particulars of interest and economy to highway builders.

Metal Signs, Tablets, Bulletins, Etc.

The Newman Manufacturing Co., Cincinnati, O., have just published two new catalogs to be distributed broadcast. One of these is devoted to high grade etched brass signs and cast bronze tablets, and the other relates to building directories and bulletin boards with a variety of sizes and letters, besides metal signs for roads, streets, roofs, sidewalks, etc.

Light for Moving Pictures.

"Light for Motion Picture Projection" is the caption of Bulletin No. 130 of the Wagner Electric Manufacturing Co., St. Louis, Mo. It treats of the subject thoroughly yet in a manner which anyone may understand and it also presents the conspicuous advantages of the Wagner white light converter for this sort of work. The bulletin is finely illustrated and there are also diagrams and tables to further illumine the text.

Boiler Use in Textile Mills.

Bulletin No. 51 of the Heine Boiler Company, St. Louis, Mo., bears the title "Boiler Practice for Textile Mills." A proper idea of its contents may be gathered from perusal of the following quotation from them: "Money is made in the generation and utilization of steam for textile manufacturing purposes when the cost of steam used in the production of the goods is below the average of competing manufacturers. If it is above the average, money is lost." The bulletin shows how money may be saved by the use of the Heine boilers. It is handsomely illustrated and bound.

Cooling Towers Described.

The Edwin Burhorn Co., engineers, contractors and manufacturers, 25 West Broadway, New York, have issued their Bulletin No. 22 describing and picturing the Burhorn cooling towers. It has been twenty years since the first cooling tower of this make was put on the market. Their special features are patented and they are built to meet the requirements of various industries. There are many illustrations showing different installations and some of them show how the towers operate. Several tables and diagrams complete the publication.

Facts About Fine Rope.

"Helping the Dealer Tie Up With the Advertising" is the name of a folder issued by the Plymouth Cordage Co., North Plymouth, Mass. It is a keen little paper telling what the company is doing in the way of advertising to help retailers in selling their products, judiciously choosing publications which reach consumers and in other ways doing all that they can to encourage trade. This company also distributes valuable booklets relative to the use and care of rope.

New Stucco and Plaster Reinforcement.

In a handsomely illustrated six-page folder the National Steel Fabric Co., Pittsburgh, Pa., announce the development of "National Stucco Plaster Fabric," which is a new product designed as a reinforcement and a base for stuccoing and plastering either frame, brick, stone or tile buildings, new or old. It is made of either No. 14 or No. 12 gauge cold-drawn galvanized steel wire, and when the plastic material is applied to it the wires become thoroughly imbedded, forming a monolithic construction of very high tensile strength. The folder contains full particulars concerning its use. Copies will be sent on request.

Use of Explosives to Make Crushed Stone.

S. R. Russell, of the technical department of E. I. duPont de Nemours & Co., Wilmington, Del., has written a valuable paper on the use of explosives in the production of crushed stone. The firm have issued this in the form of a bulletin which will be widely appreciated because Mr. Russell is generally known and his statements concerning the selection and use of explosives for quarrying are founded on thorough understanding of quarrying conditions. Especially may the methods of loading described be recommended because of the advantages to be derived from them.

Book Review.

Human Factors in Industry. By Harry Tipper. New York: The Ronald Press Co., 1922. \$2.

Years of experience and close observation while in close touch with labor in organized industries have enabled the author of this volume to attain conclusions that will attract, interest and inform the reader. He has comprehensively dealt with the relations between employers and employees and also with various experiments that have been made to modify or alter conditions in industry to the advantage of the thousands of human units participating in its manifold activities. The first part of the book contains an analysis of factors existing in the industrial situation of today, also going into the history of labor unions during the last hundred years and their present tendencies and prospects. Consideration is given to the organization of manufacturers' associations and the influence on industrial problems of late developments industrially, economically and politically. Specialization is also considered thoroughly. In the second half of the volume estimations are made of various remedies tried and experiments with new forms of industrial organization are likewise discussed, besides many other matters bearing on general industrial labor questions. Substantially and attractively bound the book will for its merits find a welcome to many a business library.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers or subscribers or not. We invite information of this character from readers in the North and West about their southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

Improved Renewable Fuses.

Reliability and economy in renewable fuses have been accomplished through the development of the fuse with the "Shurvent" construction by engineers of the Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa. This construction, which is believed to have solved the problem of satisfactory venting, acts on the principle of baffles because it retards the flow of gas

sufficiently to maintain enough pressure within the cartridge to extinguish the arc, and it also allows the gases to leave the fuse only after they have been cooled to a temperature that eliminates all hazard of fire or personal injury. In the Westinghouse "Shurvent" design the distinctive feature which meets ideal fuse requirements is the positive method of venting and cooling the hot gases generated when the fuse volatilizes. There are also many other notable features.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

A Huge Circuit Breaker.

The Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa., have shipped to the Pacific Gas & Electric Co. what is believed to be the largest high tension oil circuit breaker ever built. It was built for the 220,000 volt Mount Shasta development and is good for a 350 kilovolt wet test. Its gross shipping weight is 45 tons and the net weight, erected on its foundation, is 37½ tons. This breaker is 17 feet 6¼ inches high to the top of bushing, or 9 feet 8½ inches to top of tank, which is 8 feet by 5 feet 8 inches.

Contract for Metal Work.

The Dickie Construction Co., of St. Louis, has awarded the subcontract for ornamental metal work for the Jefferson Bank of that city to the Newman Manufacturing Co., of Cincinnati. This contract, which is one of the largest of its kind covers solid bronze grille and wickets, woven cages and all of the miscellaneous ornamental iron work in the bank.

Important Shop Changes.

The John Steptoe Company, manufacturers of shapers and milling machines, Cincinnati, O., have been making some alterations and replacements in their shops for the purpose of improving production facilities. They have replaced some tools and consequently will reasonably dispose of several shapers of their own make that have seen very little service; they are 16 and 20 inch respectively and are practically new. Their plant is an old establishment and is widely known for the quality of its output.

Principal Assistant Engineer.

John G. Hirsch, formerly supervising engineer for Lockwood, Greene & Co., engineers, Chicago, Ill., and Stone & Webster, Boston, Mass., has become associated with the Benham Engineering Co., consulting engineers, Kansas City, Mo., as principal assistant engineer. Mr. Hirsch has had very wide experience, in waterworks, water power and electric light projects.

Economical Digging and Screening of Sand.

The Essex Fells Co., Essex Fells, N. J. are using two Haiss path digging wagon loaders for taking sand from a bank, screening it and loading it into trucks, this employment of these machines, it is noted, being very economical and simple. The sand pit has a face about 40 feet high and the material dug is 75 per cent sand, and 20 per cent gravel which can pass through a 3-inch ring, the remainder being larger stones and boulders. With one of these machines two years ago, they handled and screened about 200 yards of material daily and last year they put in a creeper equipped path digging loader, operated by a four cylinder gasoline engine with which one operator can easily load 250 yards daily. A plain screen and two chutes are used to screen the sand. These loaders are made by the George Haiss Manufacturing Co., Inc., 141st St. and Rider Ave., New York City.

The Responsibility Upon Those Who Are Interested in Humanity.

J. T. THOMAS, Pres., Grenada Bank, Grenada, Miss.

"Because he knew that it would express its sincere convictions as to his road and its management entirely without regard to whether he did or did not advertise in it".

"The world is facing an actual cotton famine, and cotton ought to be selling at two or three times the present price. But cotton is selling like wheat and corn, far below the cost of production. The farmers know these things just as well as you and I do. They know they are going deeper and deeper into debt as a result of the definite efforts made during the last three years, since the summer of 1919, to break down the prices of farm products. They know that the combined influence of political power and of finance has been to break the price of farm products".

"It would be far better for the country if prices of farm products and of other things would be advanced to a point where railroad freight rates could be maintained".

"You know how an advance from 10 cents to 20 cents in the cotton market early last fall suddenly brought about a spirit of enthusiastic optimism, and was accepted by Secretary Mellon and the bankers of the country as a hopeful augury for a revival of business.".... "This opportunity was utilized by the cotton bears to break down cotton and to keep it at a low price now prevailing."

"Some days ago a South Carolina banker wrote me that in one mail he had reports of 30 farmers abandoning their farms and going into cities seeking work even at a boy's pay, in order to get something for their families".

"These figures tell you something of what the farmer has had to face: and you must remember that while the price of all products have shown this enormous decrease, the cost of raising them was far and away above any cost known in the past."

I wish, Mr. Edmonds, that I had the language to tell you just how much I appreciate your editorial in reply to Mr. Markham's letter, which in itself is splendid. I quote the foregoing paragraphs from it for the reason that they appeal to me more directly inasmuch as I know the first quotation to be absolutely true, having been a reader of your paper for a number of years.

The second quotation relates directly to my business, and I have felt the dire facts of the truism which you so aptly depict.

The third further relates to the subject in a way that should be convincing not only to Mr. Markham, but to all good people of financial standing and of such wide influence.

The fourth quotation sounds to my ears as a song of the "sweet long ago". Most true, as you say, that the advance in price of cotton did bring to people a "spirit of enthusiastic optimism", which they had not even hoped to experience.

If you could have seen, as I saw, the glad smile, the cheerful mood, indeed the happy frame of mind so general among our people because of the advance in price of cotton, the

scene would have brought a consolation to your heart and a happy comfort, in that perhaps you had contributed, in a marked degree, to the then prevailing spirit of optimism. Alas! too soon did the situation which brought to our people that spirit of optimism change to one of pessimism, because of an unwarranted and unjust, to them, decline in price of cotton and it came in about just the way you so aptly describe.

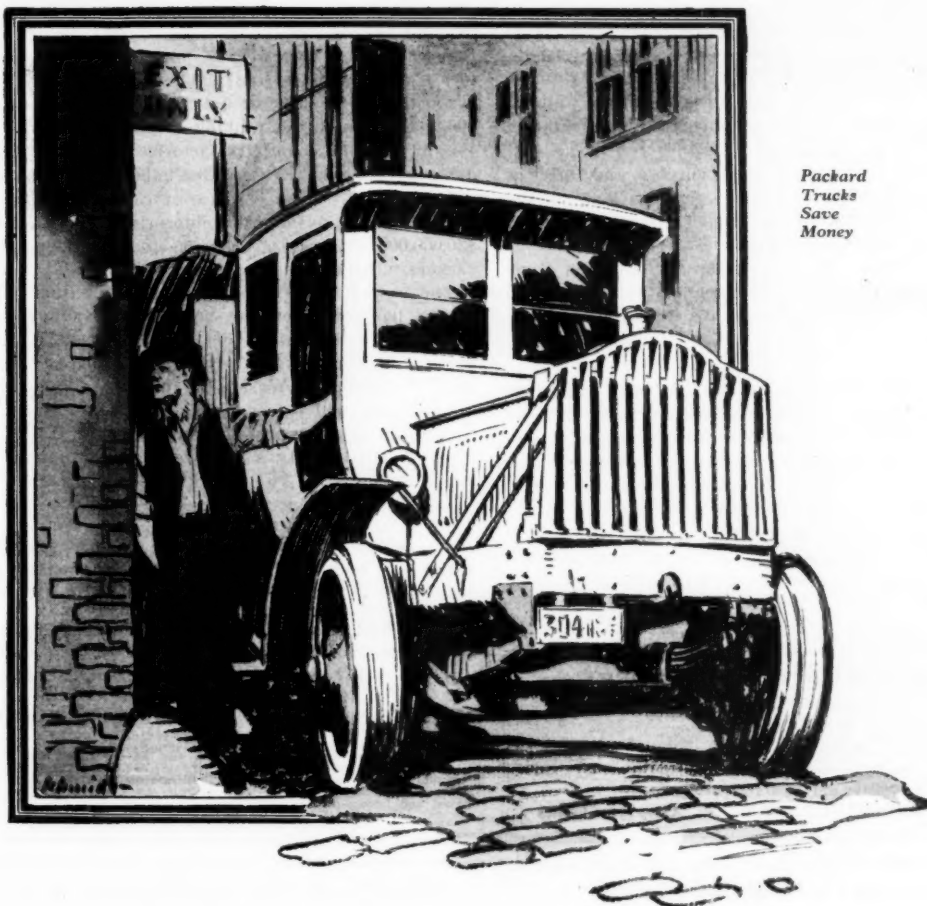
Fifth—what you say of South Carolina is absolutely true of the situation, as I see it, in this section. Think of it, counties which formerly produced eight to ten thousand bales of cotton have for the past two years produced less than a bale to the mule, notwithstanding the same amount of labor was required, same expense, etc. Is not the marked decrease in production enough to discourage a well disposed sincere tiller of the soil? Many instances I could relate about the condition of our rural people would be pitiful and, to the minds of some, harrowing.

Recently I drove through one of the counties in which we have a bank located. Along the way—a distance of five miles—through open land on either said of the road, I passed six houses, the greater number having begun to decay and fall down—nor do I recall having seen a human and hardly a bird. The rural population of that county has decreased, in the past ten years, approximately 20 per cent. I asked myself—where are the good people, who once inhabited these farms which appear to have been productive? And again—did they better their condition by leaving the homes of their childhood with all the attendant fond associations?

Unless our people can be assured of a stable market for their products, at a living price, our rural sections will soon become depopulated to an extent that our banks cannot be sustained, because the people of the rural sections will more and more desert their farms, thereby reducing the assessed valuations, when at a time—not far distant—taxes will become almost confiscatory.

Several years ago we were told by the Department of Agriculture, or its representatives in this State, to produce molasses. For two years the product commanded a fair price, hence our people planted quite an amount last year. The same was not salable last fall and cannot be sold now. Pretty much the same way with corn, a pretty fair crop was produced in this section and price ranged from 35 cents to 45 cents a bushel. Cotton at this time is hardly salable. A few bales out of a lot of many bales may be sold at from 13 to 14 cents per pound, leaving, of course, the less desirable cotton on the producers hands. Hence I say we must find a market for our products at fair prices, otherwise the result as depicted is sure to follow.

This and its allied institutions have anticipated just such



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Save
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It is perfectly plain that the Packard Truck never could have attained outstanding leadership were it not a sound, saving investment, from every viewpoint of truck operation.

The comparatively low purchase price of Packard Trucks—generally lower than prices of other trucks of comparable quality—adds great emphasis to Packard value.

The seasoned and stable organization building the Packard Truck will continue to advance and fortify still further its leadership and its reputation for lower-cost haulage.

Packard Trucks range in capacity from 2 tons, to 7½ tons; and in price from \$3,100 to \$4,500

PACKARD MOTOR CAR COMPANY, DETROIT



Packard Service

In 585 cities and towns throughout the United States, Packard Truck Service Stations give owners highly skilled service at a reasonable cost. Packard Truck costs, always low because sound, Packard construction minimizes need of repair, are held still lower by this expert, broadcast service.

PACKARD TRUCKS

a condition and have striven, with all our "might and main" to induce our people to diversify and save, thereby placing themselves in position to survive during these trying times, but few heeded and those who did are doing fairly well.

Could you give us an idea how we may make and maintain a stable market for our products?

Your publication is serving a good purpose and, after a while, your objective will be reached—yet how long? is the problem. Those of us who are interested in humanity must arise to a sense of our responsibility.

[Since the foregoing was written by Mr. Thomas there has been a marked increase in the demand for cotton and at higher prices.—Editor MANUFACTURERS RECORD.]

Louisville's Great Advance in Wealth and Industry.

Robert M. Kerr, secretary of the Merchants & Manufacturers Association of Louisville, Ky., has forwarded to the MANUFACTURERS RECORD some interesting statistics taken from Caron's 1922 City Directory, showing the forward movement in population, industry, finance and commerce of that city.

The record for building operations shows 11,123 permits in 1921 with 2493 in 1920, a gain of 8360, with an increase of \$1,867,998 in value of construction. Bank clearings while less than in 1920 were greater than in 1919 and also more

than for any year except 1918, since 1901. The directory adds that "There has been a great increase in the number of factories and manufacturing plants in Louisville. The annual production of manufactured articles, amounting to over \$100,000,000 makes it the ranking industrial city of the South. We have more than 800 factories in which about 25,000 different articles are produced, and giving employment to 45,000 persons." The increase of capital in industrial, commercial and manufacturing enterprises amounted in 1921 to \$30,000,000. "As a clearing center for stock-raisers and packers," the statement continues, "Louisville has a record second to none. All the depression at one time visible in the market has been overcome, and the Louisville Livestock Exchange, notwithstanding the inconveniences of a recent fire, is at normal condition. The receipts, compared with last year, show a decided increase and there is anticipation that a decided gain will be made this year." Its government cost per capita is about \$24.47 yearly, making it less than any other American city of between 200,000 and 300,000 inhabitants.

Agencies Desired.

JUAN V. ANGLES, JR., Antilla, Cuba.—I beg you to refer me to a flour mill desiring to be represented in this country and also to an exporter of general iron ware who wishes representation in this place and in Banes.

OCEAN FREIGHT FORWARDERS, SHIP BROKERS

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Prompt and Accurate Service.

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The Hanchett Bond Co. Inc.

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THE TITLE GUARANTEE & TRUST CO.

Capital and Surplus - - - - - \$584,000.00
S. E. Corner Court and Main Sts.
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First National Bank

RICHMOND, VIRGINIA
Capital and Surplus, \$3,000,000.
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W. M. ADDISON, Vice-President.
CHAS. R. BURNETT, Vice-President.
ALEX. F. RYLAND, Cashier.

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We are interested in the purchase of
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We want to buy bonds issued by cities, towns,
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may be able to take in exchange for work. Address
us at our nearest office.

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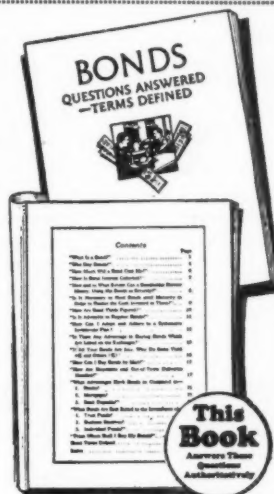
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EVEN though a consistent bond buyer, there may be some points about bonds, concerning which you desire more complete information. If an investor in other lines or a beginning bond buyer, you owe it to yourself to become fully informed on the merits of bonds as investments.

"Bonds— Questions Answered— Terms Defined"

In the thirty-six pages of this booklet are discussed the questions which our extended experience has shown are those most frequently asked by bond buyers. Its contents also include non-technical definitions of the most commonly used bond terms.



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ATLANTIC COAST LINE RAILROAD COMPANY

RICHMOND, VA., May 16, 1922.

To the Stockholders of the
Atlantic Coast Line Railroad Company:

The Board of Directors of the Atlantic Coast Line Railroad Company respectfully submits the following report for the year ended December 31, 1921:

MILEAGE.	
Miles owned December 31, 1920.....	4,750.85
Miles not owned but operated under lease and trackage contracts or operation contracted for with owner.....	154.85 4,905.70
Miles owned but not operated by this Company.....	10.88
Miles of Tampa Southern Railroad not operated.....	6.50 17.38
Miles operated December 31, 1920.....	4,888.32
Miles added during the year:	
Dupont Junction to Dupont, constructed.....	0.80
Goodno to Immokalee, constructed.....	25.84
Tampa Southern Railroad (operated for owner):	
Seth to near Palmetto, constructed.....	9.25
Gillett to Senarky, transferred from non-operated mileage.....	6.50 15.75
Added account resurvey of lines operated under contract....	0.14
Purchased by Belt Line Railway, Montgomery.....	0.18
	42.71
Less:	
Spurs to mills and factories taken up.....	6.96 35.75
Total miles operated December 31, 1921.....	4,924.07
Average mileage operated during year.....	4,893.05
Mileage owned December 31, 1921.....	4,770.53
Double-track mileage December 31, 1921.....	345.12

CORPORATE INCOME ACCOUNT.

1921.	1920.
\$66,736,767.82 Operating Revenues (Sept. 1 to Dec. 31, 1920, inc.).....	\$25,304,673.77
61,680,832.69 Operating Expenses and Taxes, " " " ".....	22,367,303.96
\$5,649,935.13 Net Operating Revenues.....	\$2,936,770.71
69,650.09 Uncollectible Railway Rev., " " " ".....	50,436.66
\$5,580,285.04 Railway Operating Income.....	\$2,886,334.05
Standard Return for use of road, (Jan. & Feb. 1920).....	1,684,187.36
Railway operating income guaranteed under Section 289, Transportation Act, 1920, March 1 to August 31, 1920, inc.....	5,478,458.01
4,423,100.80 Other Income.....	5,203,803.56
\$10,003,394.84 Gross Corporate Income.....	\$15,252,782.98
Corporate Expenses, January and February, 1920, and War Taxes, January 1 to August 31, 1920, inc.....	326,797.18
7,146,607.25 Interest and Rentals.....	\$14,925,985.80
\$2,856,787.59 Other Deductions.....	6,727,068.65
1,066,218.97 Net Corporate Income.....	\$8,198,917.15
\$1,790,568.62	514,761.40
	\$7,684,155.75

DECEMBER 31, 1920.	ASSETS.	DECEMBER 31, 1921.
	INVESTMENTS.	
\$197,393,495.79 Investment in Road and Equipment.....		\$205,157,102.56
70,234.46 Improvements on Leased Railway Property.....		70,234.46
1,198,838.28 Miscellaneous Physical Property.....		1,272,847.68
\$57,624,473.91 Investments in Affiliated Companies.....		
4,745,605.76 Stock.....	\$57,624,473.91	
4,831,076.04 Bonds.....	4,745,605.76	
884,726.22 Notes.....	5,171,076.04	
68,085,681.93 Advances.....	1,071,544.82	
\$119,571.25 Other Investments.		
1,787,500.00 Stock.....	\$119,571.25	
284,767.89 Bonds.....	1,787,500.00	
918,341.81 Notes.....	284,767.89	
3,110,180.95 Advances.....	1,162,848.96	
\$269,858,631.41 Total.....		\$278,467,482.60
	CURRENT ASSETS.	
\$7,945,092.18 Cash.....		\$14,022,407.48
937,146.89 Special Deposits.....		
\$590,225.00 Cash for Dividends.....		1,770,073.52
575,000.00 Interest and Debts.....		
168,675.86 Bonds to Secure Leases.....	\$590,225.00	
3,343,743.12 Less: This Company's Own Issues.....	575,000.00	15,225.00
1,237,964.35 Loans and Bills Receivable.....		105,802.19
4,250,689.99 Traffic and Car Service Balances.....		2,335,044.93
9,203,722.97 Net Balance Receivable from Agents and Conductors.....		789,982.60
1,706,495.71 Miscellaneous Accounts Receivable.....		2,578,154.94
252,102.30 Materials and Supplies.....		7,454,612.23
Net Balance Due from U. S. Government: Federal control period.....		1,612,608.55
Guaranty period.....		130,434.82
\$6,717,135.67 Total.....		\$33,959,218.13

DEFERRED ASSETS.		
\$38,573.04 Working Fund Advances.....		\$28,303.84
Insurance and Other Funds:		
Total Book Assets.....	\$534,150.57	
Less: This Company's Own Issue.....	150,000.00	384,150.57
United States Government, Materials and Supplies (see contra).....		
5,313,554.34 Total.....		\$412,454.41
\$5,715,741.45		
	UNADJUSTED DEBITS.	
\$1,924,717.29 Other Unadjusted Debits.....		\$736,505.48
Securities Issued or Assumed:		
Par value of holdings—		
Unpledged—		
1921 \$21,205,584.11		\$10,000,000.
1920 19,362,393.00		10,000,000.
\$318,234,887.49 Grand Total.....		\$313,575,660.62
	DECEMBER 31, 1920.	DECEMBER 31, 1921.
\$67,586,200.00	LIABILITIES.	
1,000,000.00	STOCK.	
196,700.00	Common Stock.....	\$67,586,200.00
\$68,782,900.00	Class "A" Richmond & Petersburg Railroad Co. Stock.....	1,000,000.00
	Preferred Stock.....	196,700.00
4,829,442.50	Premiums realized on Capital Stock.....	4,829,442.50
\$73,612,342.50 Total.....		\$73,612,342.50
	LONG TERM DEBT.	
\$6,029,500.00	Equipment Trust Obligations.....	\$10,454,200.00
	Mortgage Bonds:	
	Book Liability.....	\$131,054,584.11
	Held by or for Company.....	31,930,584.11
102,124,000.00		102,124,000.00
41,000,000.00	Collateral Trust Bonds and Notes.....	41,000,000.00
15,000.00	Income Bonds.....	15,000.00
4,580,555.00	Miscellaneous.....	4,579,930.00
\$154,394,055.00 Total.....		\$158,173,130.00
	CURRENT LIABILITIES.	
\$190,000.00	Loans and Bills Payable.....	\$170,000.00
2,060,389.54	Traffic and Car Service Balances.....	1,036,375.10
7,830,425.14	Payable.....	
802,762.04	Audited Accounts and Wages.....	4,009,025.58
497,763.34	Miscellaneous Accounts Payable.....	624,368.02
5,850.75	Interest Matured Unpaid.....	473,555.84
3,000.00	Dividends Matured Unpaid.....	5,850.75
2,400,517.00	Funded Debt Matured Unpaid.....	6,000.00
1,404,019.49	Unmatured Dividends Declared.....	2,400,517.00
6,494.25	Unmatured Interest Accrued.....	1,513,261.24
\$15,201,221.55	Unmatured Rents Accrued.....	1,356.25
	Total.....	\$10,240,309.78
	Net Bal. due U. S. Government: Federal Control Period.....	\$125,222.00
	DEFERRED LIABILITIES.	
\$5,644,979.63	United States Government, Materials and Supplies (See Contra).....	
620,415.00	Other Deferred Liabilities.....	\$401,709.22
\$6,264,687.03		401,799.22
\$6,264,687.03	Total.....	\$527,021.22
	UNADJUSTED CREDITS.	
\$1,397,729.07	Tax Liability.....	\$1,456,904.84
501,746.04	Insurance and Casualty Reserves.....	531,115.06
665,018.75	Operating Reserves.....	937,130.91
1,022,841.06	Accrued Depreciation—Road.....	
15,916,001.85	Accrued Depreciation—Equipment.....	16,158,103.61
1,819,163.92	Other Unadjusted Credits.....	2,172,445.19
\$90,622,190.60	Total.....	\$21,255,699.61
	CORPORATE SUPPLIES.	
\$225,945.18	Additions to Property Through Income and Surplus.....	\$1,062,509.26
47,320,125.56	Profit and Loss, Credit Balance.....	48,704,648.25
\$48,185,390.72	Total.....	\$49,767,157.51
\$318,234,887.49	Grand Total.....	\$313,575,660.62

ATLANTIC COAST LINE RAILROAD COMPANY.

(Continued from preceding page.)

GENERAL REMARKS.

On August 18, 1921, by authority of your Directors contract was executed by this Company and the Director General of Railroads covering full and final settlement of all claims and demands of your Company growing out of and connected with the period of Federal control. This settlement resulted in the payment to your Company by the Director General of Railroads of \$5,442,744.42.

No final settlement has yet been made with the United States Government of your Company's claim on account of operations during the Guaranty period. In accordance with the orders of the Interstate Commerce Commission the accounts for the Guaranty period have been closed as of December 31, 1921, and the complete claim of your Company has been filed with the Commission.

Under orders issued by the Interstate Commerce Commission, required by Section 13a of the Interstate Commerce Act, as amended, relating to payment to the Federal Government of Railway Operating Income in excess of six per cent of the value of railway property used in transportation service, your Company filed returns showing that its Railway Operating Income for the four months ended December 31, 1920, was at the rate of 4.68% per annum and for the year ended December 31, 1921, was at the rate of 2.90% per annum on the value of railway property used by it in transportation service, so that your Company will not have to make payment on this account.

The comparative statement of Operating Expenses and Taxes for the years ended December 31, 1920 and 1921, on page 5 of this report, shows a decrease in Operating Expenses of \$10,988,029.48, or 15.93%, due principally to a reduction in wages made by the United States Railroad Labor Board in effect July 1, 1921; to a decrease in the amount of engine coal consumed; to a decrease in the number of engine and train miles run; to a reduction in the number of employees; to a reduction in the prices of materials and supplies and to increased efficiency of operation.

Operating revenues during the year ended December 31, 1921, showed a decrease of \$7,391,187.88, or approximately 10%, as compared with the previous year, only a small part of which was due to a reduction in freight rates. There was a decrease of 4,144,802, or 23.92%, in the number of revenue tons hauled, and a decrease of 3,152,991, or 31.74%, in the number of revenue passengers carried. Since the close of the year, additional reductions in freight rates have been put in effect, including a reduction of 10% in the rates on products of the farm, ranch and orchard. This reduction of 10% was voluntarily initiated by the Railroad Companies in order to help the agricultural depression which prevailed throughout the country, and was put into effect for an experimental period of six months from January 1, 1922, to June 30, 1922. It is estimated that, based on the expectation of a slightly greater volume of traffic than was moved in the corresponding six months of 1921, the lower rates will reduce our gross revenue approximately \$1,412,500.

As stated in the annual report for 1920, part of the completed portion of the Eilenton Belt-Sawgrass Spur of the Tampa Southern Railroad was opened for service on January 12, 1921. Construction of the Eilenton Belt Line from Seth to junction with the main line near Palmetto, Fla., a distance of 9.25 miles, was completed and the whole line placed in service November 1, 1921. During the year your Company entered into a contract by which it agreed to operate the entire mileage of the Tampa Southern Railroad Company, as Agent for that Company.

Construction of the Haines City Branch extension, from Goodno to Immokalee, Fla., a distance of 25.84 miles, was completed during the year, and bi-weekly through train service on the new line was inaugurated October 16, 1921.

*Attention is called to the following statements submitted as a part of this report:

Roadway Operations.

Equipment.

Additions and Betterments charged to Cost of Road.

Additions and Betterments charged to Cost of Equipment.

Increase in Cost of Road and Equipment.

Accounting Department Statistics.

The Board of Directors acknowledges its appreciation of the support of the patrons of the Company and of the services of its officers and employees.

J. R. KENLY,
President.

H. WATERS,
Chairman.

*These statements appear in the complete pamphlet report.

Deal Reported for a Texas Line.

William Edenborn, president, of the Louisiana Railway & Navigation Company operating a railroad from Shreveport to New Orleans, La., 306 miles, has been in negotiation, according to reports from New Orleans, looking to an acquisition of the Missouri, Kansas & Texas Railway Company's branch line extending from McKinney, Tex., via Greenville, Winnsboro, Pittsburg, Hughes Springs, Jefferson and Waskom, Tex., to Shreveport, about 202 miles, his aim being to secure a share of traffic to and from the northern part of Texas.

Mr. Edenborn is mentioned in the reports as having concluded arrangements for the deal, but reports from New York represent bankers identified with the Missouri, Kansas & Texas System as saying that the New Orleans reports are premature and furthermore that the line in question is worth about \$6,500,000 instead of the \$30,000,000 reported from New Orleans.

It is further observed that the omission of the line from the reorganization plan of the Missouri, Kansas & Texas system pointed toward a sale. There is a mortgage of \$1,689,000 on it with interest in default for more than six years. Its purchase would give the Edenborn line access to the oil fields at Mexia, Tex., by connections through Dallas

and Fort Worth. The road was built more than 20 years ago and was then known as the Shreveport, Sherman & Southwestern Railway.

Reorganization of a Recently Purchased Line.

The reorganization of the Tennessee, Alabama & Georgia Railroad Co. plans a capitalization of \$800,000 according to a report from Gadsden, Ala. C. E. James of Chattanooga, Tenn., who recently purchased the road, will be president; W. T. James, his son, will be vice president and general manager, and D. E. Hedges treasurer and auditor. H. A. Bohr will continue as traffic manager. The work of repairing the road is proceeding rapidly.

\$750,000 Coal and Ore Handling Plant Now in Operation.

Mobile, Ala., May 19—[Special.]—The first unit of the coal and ore handling plant built by the Inland and Coastwise Waterways Service is now in operation. With the United States Shipping Board fuel oil station occupying a part of the site, the \$37,500 paid by the people of Mobile for the 1500 feet of frontage, and other incidental work, the



COAL AND ORE HANDLING PLANT COMPLETED AT MOBILE WITH HOURLY CAPACITY OF 400 TONS.

whole represents an investment of approximately \$750,000. The coal plant has been under construction for about one year.

The plant consists of a creosoted timber wharf on pile foundation, 33 feet wide and 500 feet long; a structural steel unloading bridge which travels the length of the wharf and operates a four ton bucket; a structural steel reloader, which also travels the length of the wharf; and a storage floor 80 by 500 feet with a capacity of 40,000 tons. The plant has a capacity of 400 tons an hour. All machinery is electrically controlled and fully protected with magnetic brakes, automatic cut-outs, etc.

A channel leading from the main ship channel to the front of the plant has been dredged to a depth of 25 feet, and this will ultimately be increased to 30 feet.

With this new unit complete Mobile offers facilities for fueling both oil and coal burning vessels. It will be used for the transfer of manganese ore brought from mines in Brazil to barges of the Mississippi-Warrior service for transportation to the Port of Birmingham.

Middle West Steel Merger.

According to press reports from St. Louis plans for a merger of the Consolidated Steel & Iron Co., of that city, with \$7,000,000 capitalization, and the Hoosier Rolling Mill Co., of Terre Haute, Ind., with \$5,000,000 capitalization, have been practically completed, quoting from a statement of J. R. Finkelstein, president of the last named company.

To Men of Vision—

Sixty years ago the rubber industry was an affair of rubber balls and rubber mackintoshes—today it is the third largest industry in the world, and rubber goes into some 30,000 different articles. Every industry depends upon rubber in various forms for its simplified and economical operation. Not one can do without it.

It follows, naturally, that there are unusual possibilities in the development of mechanical rubber goods sales. New uses, new applications, and new substitutions of rubber for higher priced materials are widening the field daily. Some of the largest distributors and supply houses are finding their rubber division one of the most profitable departments of their business.

Let us help you to specialize in your Rubber Department, thus realizing in the fullest measure these potential profits. Or, if you are not now handling Mechanical Rubber, let us present our plan for adding this to your other lines, thus giving to your present customers a more varied and profitable service.

THE DIAMOND RUBBER COMPANY, INC.

Akron, Ohio



*The Top of a Road is Important—
but what is under it counts too*

—USE—

WARRENITE-BITULITHIC PAVEMENT

on Bituminous Concrete Foundation.

(Black Base)

Always laid with careful consideration for the subsoil conditions. Expert road engineers, backed by full laboratory service, supervise all construction and lay this pavement over properly prepared foundation—then the wonderful surface gives its matchless service for years.

Let us send you interesting information concerning WARRENITE-BITULITHIC PAVEMENT on "Black Base."

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Curtailment of Currency and Credit.

J. F. JACOBS, Jacobs and Company, Clinton, S. C.

I was very much interested in your editorial on the policy of the Federal Reserve Banking system, and wish to congratulate you upon the very valuable information you are giving to the public. Secretary Houston and Mr. W. P. G. Harding both gave out interviews in May and June, 1920, indicating that it was their purpose to reduce the cost of living which of course could only be accomplished by reducing commodity prices, and that they could only accomplish by restricting circulation. I have been much surprised to find that Senator Glass' speech attempts to prove that there has been no restriction in circulation, yet newspaper articles indicate a reduction in January of this year of \$3.00 per capita on our population, and a reduction of over a billion dollars in the Federal Reserve Note circulation during 1920 or \$10.00 per capita.

It seems to the writer that the actual figures of the reduction in circulation by retirement of Federal Reserve notes from July 1, 1920 to December 31, 1920 and from January 1, 1921 to December 31, 1921, and from January 1, 1922 until this date, should be shown. The public ought to know how the volume of circulation has been reduced, and they ought to be able to see just how that stands related to a fall in commodity prices and of course they can easily understand how the fall in prices stands related to the wreckage of their affairs. We have undoubtedly had the most calamitous handling of our financial affairs that we have ever experienced. No prior panic has done nearly so great damage to our financial institutions, and to our business generally as has this depression. I believe it is not permitted to call it a panic.

For instance, Georgia lost in one year over sixty banks, North Dakota about the same, Savannah, Ga., which had never before lost a bank, lost six. Boston, Mass. in a short period lost six. Over fifty brokers have failed in New York

City in the last few months—members of the exchanges.

It seems to the writer that there are two very serious defects in our Federal Reserve system. The first of these is that it leaves the property of the people absolutely at the mercy of a small board. It is too much to place such confidence in a single board, absolutely without any check.

Another defect of the system is that it only permits the use of semi-liquid assets as a basis for money issue; i. e. good moving from producer to consumer. The privilege of money issue originally was a personal privilege, not a national right. National governments have made a botch of the use of that privilege, with the result that most of the money in the world today is depreciated in value, and none of it is intrinsically worth dollar for dollar—not even our own money, with the exception of our gold certificates which one seldom ever sees these days in circulation.

Textile Mill Notes

Installation of electric drive to replace the old type of waterpower will be made by the Lockhart Mills of Lockhart, S. C.

The mill buildings of the Columbia Manufacturing Co., Ramseur, N. C., will be remodeled, 2000 looms installed for replacement and a portion of the plant electrified. The generator to be installed will be operated by the present water wheel and motors will be placed in the weave room, etc.

A one-story, 50x165 foot quiller building will be erected by the Duncan Mills of Greenville, S. C. The structure will have a steel side wall sash and continuous monitor sash. The engineers are J. E. Sirrine & Co. of Greenville, S. C.

The Victor-Monaghan Co. of Greenville, S. C., will erect an addition to its plant, the building to be 3 stories high, 132x120 feet, of mill construction with steel sash. J. E. Sirrine & Co. of Greenville, S. C., are the engineers.

PROPOSALS

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS

Bids close June 15, 1922.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., May 15, 1922. SEALED PROPOSALS will be opened in this office at 3 P. M., June 15, 1922, and in the office of the Superintendent of Construction, U. S. Veterans Hospital, Whipple Barracks, Prescott, Arizona, at 1 P. M., June 15, 1922, for electric light, power and telephone systems, at the U. S. Veterans Hospital, at Whipple Barracks, Prescott, Arizona, in accordance with specification and drawings, copies of which may be had at this office, or at the office of the Superintendent of Construction, at Whipple Barracks, Prescott, Arizona, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Bids close June 13, 1922.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., May 16, 1922. SEALED PROPOSALS will be opened in this office at 3 P. M., June 13, 1922, for extension to workroom, mailing vestibule and driveway, United States Post Office, Charleston, S. C. Drawings and specification may be obtained from the Custodian at the building, or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Bids close June 12, 1922.

Sealed proposals will be received at the office of the General Treasurer, National Home for D. V. S., National Military Home, Dayton, Ohio, until one o'clock P. M., June 12, 1922, for furnishing labor and material and complete construction of nurses quarters at the Central Branch as per plans

and specifications on file with the architects, Schenck and Williams, Dayton, Ohio, and in the office of the Quartermaster, Central Branch, at which time bids will be opened in the presence of bidders.

Bids close June 7, 1922.

\$50,000 6% Time Warrants

Sealed bids will be received by Board of County Commissioners of St. Lucie County, Florida, up to two o'clock P. M., June 7, 1922, for \$50,000 6% Coupon Time Warrants, dated July 1, 1922; semi-annual interest; \$1000 each; maturing two Warrants each year 1923 to 1932, inclusive, and three Warrants each year 1933 to 1942, inclusive. Certified check for \$1000 must accompany each bid. For further information address P. C. Eldred, Clerk, Fort Pierce, Florida.

Bids close May 27, 1922.

\$175,000 5½% School Bonds

Orange, Texas

City Commission at 11:00 A. M. Saturday morning, May 27th, 1922, at City Hall, at Orange, Texas, for the purchase of \$175,000.00, 5½%, 20 year serial School Bonds, with maturities averaging 14½ years. The City Commission reserves the right to reject any and all bids.

Each and all bids must be accompanied by a Cashiers check on a bank doing business at Orange, Texas, to the amount of 5% of Bonds, as an evidence of good faith. By order of the City Council,

M. G. DAVIES, Secretary.

Bids close June 6, 1922.

\$150,000 Serial Bonds

Union, S. C., May 12, 1922.

The Street Commission of the Town of Union, South Carolina, will sell to the highest bidder for par \$150,000 worth of Serial Coupon Bonds of the Town of Union, South Carolina, on the 6th day of June, A. D., 1922, at 12 o'clock noon, in the office of Emslie Nicholson, Chairman of the Said Commission, at Nicholson Bank & Trust Company, Union, South Carolina.

Bonds to be dated the 1st day of July, A. D., 1922, to bear interest at the rate of not more than five (5) per cent interest to be paid semi-annually, on the first day of January and the first day of July of each and every year, and the said bonds to run for not less than twenty (20) years nor more than forty (40) years, with the right reserved to the said Town of Union, to redeem any or all of the said bonds at any time after thirty (30) years.

The right is reserved to reject any or all of the said bids. Each bidder is required to deposit certified check in the sum of One Thousand (\$1000) Dollars, with said bid as evidence of good faith to become forfeited in event said bid is accepted and such bidder fails to comply with the same.

All bids to be sealed and mailed to Emslie Nicholson, Chairman, Union, South Carolina, on or before the 6th day of June, A. D., 1922, at 12 o'clock noon.

EMSLIE NICHOLSON, Chairman,
Street Commission of Town of Union,
R. P. MORGAN,
J. F. CHEEK,

Members of said Commission.

Bids close June 5, 1922.

\$55,000 6% Bonds

Ellisville, Miss.
\$55,000 Jones County, Mississippi School and Colony for the Feeble-minded bonds, 6% payable semi-annually.

Sealed bids to be filed with Clerk of Board of Laurel by 12 M., June 5th, 1922, accompanied by certified check for \$100.
U. S. COLLINS, Clerk.

Bids close June 5, 1922.

\$750,000 5% Road and Bridge Bonds

Highlands Special Road and Bridge District of Pasco County, Florida, offers \$750,000 five (5%) per cent serial bonds until 2 o'clock P. M., June 5th, 1922.

A. J. BURNSIDE, Clerk Board Co. Comm., Dade City, Florida.

Bids close June 9, 1922.

Notice of Sale of Bonds

Winter Haven, Fla.
The Town of Winter Haven, in Polk County, Florida, will, up to 2 o'clock P. M., on the ninth day of June, 1922, receive sealed bids for 275 bonds of one thousand dollars each, par value, the proceeds of which bonds will be used in building sewer system, paving streets and building City Hall and constructing Whiteway in said town. The right is reserved to reject any and all bids and re-advertise said bonds, each bid must be accompanied by a certified check or cashier's check for \$3500, payable to Town of Winter Haven, as a guarantee that the successful bidder will accept and pay for said bonds.
Any further information may be obtained from the undersigned.
M. L. HINDERLITER,
Town Clerk.

Bids close May 31, 1922.

**\$30,000 City Bonds
\$40,000 County Bonds**

STATE OF SOUTH CAROLINA
COUNTY OF MCCORMICK
McCormick, S. C.

May 10, 1922.
Notice is hereby given that sealed bids will be received by the Town Council of the Town of McCormick and the Board of County Commissioners for the County of McCormick and State aforesaid up to 12 o'clock noon, May 31, 1922, at the office of the undersigned in the town of McCormick, South Carolina.

1. For \$30,000 of coupon Bonds of the Town of McCormick, to be dated the 15th day of June, 1922, bearing a rate of interest not exceeding 6 per cent, payable semi-annually on the 15th day of June and the 15th day of December of each year, with both principal and interest payable at some bank in New York. Such bonds payable 40 years after date, redeemable at the option of the said Town within 20 years and to be in such denominations as may be agreed upon between the purchaser and the said Town.

2. For \$40,000 of Coupon Bonds of the County of McCormick to be dated the 15th day of June, 1922, and bearing a rate of interest not exceeding six per cent, payable semi-annually on the 15th day of June and the 15th day of December of each year, with both principal and interest payable at some bank in New York. Such bonds to be redeemable 20 years from date thereof.
A certified check for the sum of \$500 payable to J. H. Lyon, Supervisor of McCormick County, must accompany each bid before the same shall be considered. Checks of unsuccessful bidders will be returned.

The sale of County bonds set out in paragraph two are contingent upon the sale of the Town of McCormick bonds set out in paragraph one, and the Board of County Commissioners of the County of McCormick reserves the right to accept or reject any bids made for the County Bonds until after the sale of the Town Bonds.

The Town Council of the Town of McCormick and the Board of County Commissioners for the County of McCormick, specifically reserve the right to reject any and all bids for the said bonds or any part thereof.

L. L. RANKIN, Clerk,
Board of County Commissioners
and City Council.

Bids close June 6, 1922.

Concrete Roads

STATE OF MARYLAND
STATE ROADS COMMISSION
NOTICE TO CONTRACTORS
Baltimore, Md.

Sealed proposals for building three sections of State Highway, as follows:
Harford County—Contract H-30—One section of state highway between Shawsville and Norrisville for a distance of 3.6 miles—(Concrete).

Caroline County—Contract CO-29—One section of state highway along Railroad Avenue, Greensboro, and along Railroad Avenue, Preston, a distance of 0.95 miles—(Concrete).

Wicomico County—Contract WI-20—One section of state highway from Royal Oak toward Nanticoke for a distance of 2.05 miles—(Concrete).

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. Standard Time, on the 6th day of June, 1922, at which time and place they will be publicly open and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of \$1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred (\$500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 18th day of May, 1922.

J. N. MACKALL,
Chairman.

L. H. STEUART,
Secretary.

Bids close June 14, 1922.

Road Construction

Clearwater, Fla.
Sealed proposals will be received by the Board of County Commissioners of Pinellas County, Florida, at the Court House at Clearwater, Fla., up until Eleven (11) o'clock A. M., Wednesday, June 14, A. D., 1922, at which time they will be opened and read publicly; for the construction and reconstruction of various roads with Vitriol brick on compacted rock base with Asphalt filler. Sheet Asphalt on Compacted rock base. Bituminous Macadam on compacted rock base and Couble Bituminous surface treatment with refined tar on compacted rock base. The work will include the following approximate quantities:

264 acres Clearing and Grubbing
404,100 cubic yards regular excavation
40,500 cubic yards dredged excavation
9,633 cubic yards Rock shoulder excavation

423,100 square yards five inch compacted rock base
312,678 square yards six inch compacted rock base

478,274 lineal feet of Pecky Cypress curb.
571,930 lineal feet four inch by fourteen inch Granite curb or
571,930 lineal feet six inch by fifteen inch concrete curb

279,155 square yards Vitriol brick pavement with Asphalt filler.

159,860 sq. yds. Vit. brick, taken up, cleaned and relayed with Asph. filler

450,324 sq. yds. Sheet asphalt one inch binder, one and one-half inch top or

450,324 sq. yds. Bit. Macadam, Pen. Method, two and one half inch, or

450,324 sq. yds. Double Bit. surface treatment using refined tar.

118,236 sq. yds. Scarifying and reshaping old rock & shell roads

11,648 cubic yards additional rock for old base

1,672 cubic yards stone rip rap
34,790 square yards 6 inch compacted shell base.

The above work to be done in accordance with plans and specifications on file in the County Engineers office at Clearwater, Florida. Bidders may submit proposals on each road separately or on the combined project as a whole. It being understood however that the Board of County Commissioners reserves the right to award this work as they deem best either separately or as a whole. A certified check on a Pinellas County Bank, or a Bidders Bond executed by a reputable Bonding Company authorized to do business in the State of Florida, in the sum of five (5%) per cent of the amount bid and drawn to the order of Pinellas County, E. H. Beckett, Chairman, Board of County

Commissioners, must accompany each bid. A bond in the sum of one hundred (100%) per cent of the amount of the Contract with a satisfactory Surety Company doing business in the State of Florida, will be required for the faithful performance of the work.

All bids will be compared on the basis of the Engineers estimate of the work to be done.

Copies of the Plans and specifications may be obtained from the County Engineer upon receipt of Ten (\$10.00) dollars made payable to J. N. Brown, Clerk or may be examined at the office of the County Engineer at Clearwater, Florida.

The letting of this Contract is contingent upon funds to be derived from the sale of Bonds of Pinellas County, Florida, to be voted on at an election to be held between the twenty-second (22) and the twenty-ninth (29) of July, A. D., 1922. The right is reserved to select the type of paving for any road and to reject any or all bids.

J. N. BROWN, Clerk
E. H. BECKETT, Chairman
Board of County Commissioners
C. E. BURLESON,
County Engineer.

Bids close May 31, 1922.

Road Improvement

SUMTER COUNTY PERMANENT ROAD COMMISSION

Sumter, S. C.
NOTICE IS HEREBY GIVEN that sealed proposals will be received by the Sumter County Permanent Road Commission at the City Council Chamber in Sumter, S. C., until 10.00 o'clock A. M., May the 31st, 1922, for the Grading, Drainage Structures and several types of Hard Surface Pavement on the following roads:

STATESBURG ROAD—F. A. Project 163, approximately 3.64 miles.

CAMDEN ROAD—SEC. "A," approximately 1.74 miles.

PINEWOOD ROAD—approximately 4.50 miles.

CAMDEN ROAD—SEC. "B," (Grading only, 39,000 cubic yards) approximately 4.77 miles.

Bid on each road must be accompanied by bidders bond or certified check for \$2000. If the work is bid on as a whole, a check or bond for \$4000 must be submitted.

Plans for the work may be seen at the office of the Engineers, LEE, PENNELL & MURRAY, Sumter, S. C. Specifications and proposal forms may be obtained from the Engineers upon request accompanied by a check for \$5.00 which sum will be refunded if same are returned within 30 days after receipt of bids. Plans and proposal forms for F. A. Project No. 163 may be obtained from the State Highway Department, Columbia, S. C., for the sum of \$5.00.

The right is reserved to reject any or all bids and to waive all technicalities.

Sumter County Permanent Road Commission.

Sumter, S. C.
LEE, PENNELL & MURRAY, Engrs.,

Bids close June 5, 1922.

Bids close May 31, 1922.

Paving

Union City, Tenn.
Sealed bids will be received by the Mayor and Board of Aldermen of Union City, Tenn., at their office in the City Hall, until 7.30 P. M., Wednesday, May 31, 1922, when they will be publicly opened and read.

The work will include:

- (1-A) 31,042 sq. yds. concrete paving.
8,870 cu. yds. excavation; or
- (1-B) 26,350 sq. yds. asphalt; or asphaltic concrete; or rock asphalt; or bitulithic paving; on concrete, or on macadam, or on telford foundation.
4,690 sq. yds. water table.
9,810 to 11,090 cu. yds. excavation, and
- (2) 9,549 lin. ft. curb and gutter.
3,286 lin. ft. drain pipe with inlets, manholes and junction boxes.

Plans and specifications for the above work can be seen at the office of the City Recorder in Union City, Tenn., or at the office of the Engineer, J. H. Weatherford, 64 Porter Building, Memphis, Tenn. Copies may be had from the Engineer for \$10.

Payments will be made in cash. Certified check or bidder's bond for ten per cent to accompany bid. Construction bond full amount of contract.

The right is reserved to reject any and all bids.

J. W. WOOSLEY, Mayor.
W. D. KEISER, Recorder.